PORSF
11.3.31.5.1-9
5/16/08

DECLARATION

I declare under penalty of perjury that I am authorized to respond on behalf of Respondent and that the attached responses for Terminal 5 is complete, true, and correct.

Executed on May 16, 2008

Signature

Tom Imeson
Type of Print Name

Public Affairs Director
Title

Mailing Address:
Port of Portland
P.O. Box 3529
Portland, OR 97208
Phone (503) 944-7000

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Environmental
Cleanup Office

EPA Question	Response	Reference
Section 1.0 - Respondent Information		
1. Provide the full legal, registered name and mailing address of Respondent.	Port of Portland 121 NW Everett Portland, Oregon 97209	
2. For each person answering these questions on behalf of Respondent, provide:	1. Nicole LaFranchise Environmental Project Manager Port of Portland 121 NW Everett Portland, OR 97209 (503) 944-7323 - office (503) 944-7353 - fax Nicole.LaFranchise@portofportland.com 2. Sara Moore Environmental Liability Analyst Port of Portland 121 NW Everett Portland, OR 97209 (503) 944-7033 - office (503) 548-5780 - fax Sara.Moore@portofportland.com 3. Sebastian Degens Marine Planning & Development Manager Port of Portland 121 NW Everett Portland, OR 97209 (503) 944-7214 - office (503) 548-5757 - fax Sebastian.Degens@portofportland.com 4. Jeff Krug Terminal Manager	

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121 NW Everett
Portland, OR 97209

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5. Suzanne Brooks
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6. David Breen
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7. Troy Graham
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8. URS Corporation

	Alicia Voss, Jennifer Renninger, Hernan Rodriguez 111 SW Columbia Boulevard Portland, Oregon 97201 (503) 222-7200 - office (503) 222-4292 - fax Alicia_Voss@URSCorp.com Jennifer_Renninger@URSCorp.com Hernan_Rodriguez@URSCorp.com 9. Ash Creek Associates Amanda Spencer, Herb Clough 9615 SW Allen Boulevard, Suite 106 Portland, Oregon 97005-4814 (503) 924-4707 - office (503) 924-4707 - fax aspencer@ashcreekassociates.com hclough@ashcreekassociates.com	
a. full name;	See response to Question 2 above.	
b. title;	See response to Question 2 above.	
c. business address; and	See response to Question 2 above.	
d. business telephone number, electronic mail address, and FAX machine number.	See response to Question 2 above.	
3. If Respondent wishes to designate an individual for all future correspondence concerning this Site, please indicate here by providing that individual's name, address, telephone number, fax number, and, if available, electronic mail address.	Nicole LaFranchise Environmental Project Manager Port of Portland 121 NW Everett Portland, OR 97209 (503) 944-7323 - office (503) 944-7353 – fax Nicole.LaFranchise@portofportland.com	
Section 2.0 - Owner/Operator Information		

4. Identify each and every Property that Respondent currently owns, leases, operates on, or otherwise is affiliated or historically has owned, leased, operated on, or otherwise been affiliated with within the Investigation Area during the period of investigation (1937-Present). Please note that this question includes any aquatic lands owned or leased by Respondent.	This response addresses the Port of Portland's Marine Terminal 5 property, which consists of approximately 159 acres located on the east bank of the Willamette River between River Miles 1.5 and 2.0. It is situated in the SW ¼ of Section 23 and NW ¼ of Section 26 of Township 2 North, Range 1 West, Willamette Meridian. Addresses for the property are as follows: • 15540 N. Lombard • 15550 N. Lombard • 15560 N. Lombard • 15660 N. Lombard • 15670 N. Lombard • 15750 N. Lombard The legal description for the property is included in the response to Question 13 below.	See March 2007 facility map at Tab 1.
a. Currently Owns	The Port of Portland currently owns the Terminal 5 property and leases the facility to three tenants described in bullet (b) below.	See March 2007 facility map at Tab 1.
b. Currently Leases	• Portland Bulk Terminals – leases 100 acres and 3,400 feet to waterfront (southern portion of the Terminal 5 property) for use as a bulk loading facility for potash. • Columbia Grain – leases 43 acres and 600 feet of waterfront (northern portion of the Terminal 5 property) for use as a bulk loading facility for grain. • Tenex – leases approximately 16 acres and 600 feet of waterfront (central portion of the Terminal 5 property) for storage and distribution of commercial products	See tenant agreements at Tab 2.
c. Currently Operates	The Port engages in property management and limited grounds maintenance (landscaping) at Terminal 5. The Port also has maintenance responsibility for the dock and access ramp to Berth 503 (fender system, maintenance dredging, concrete repair) and some maintenance dredging responsibilities at Berth 501 and 502. The tenants identified above currently operate their respective leaseholds. Portland Bulk Terminals also has an agreement with Kinder Morgan Bulk Terminals for the operation and management of its facility. See PBT 104(e) response for additional information on this relationship.	
d. Historically Has Owned	Land that comprises Terminal 5 was originally owned by the State of Oregon State Land Board. Terminal 5 was part of the Leadbetter Estate, which was condemned by the Port and acquired from trustee Willamette University in 1965. The Port acquired certain filled portions of Terminal 5 from the State of Oregon in 1967. In 1975, the Port sold approximately 11.9 acres of the southernmost portion of Terminal 5 to Gilmore Steel (predecessor to Evraz Oregon Steel Mills (hereinafter EOSM)). In 1977, the Port sold 33.2 acres of the southern portion of the Terminal 5 property to Pacific Supply Cooperative. In 1980, the Port reacquired the 33.2–acre parcel from Cenex (the successor-in-interest to Pacific Supply Cooperative). In 1981, the Port reacquired the 11.9-acre parcel from EOSM.	See deeds and purchase and sale agreements at Tab 3.
e. Historically Has Leased	Prior leaseholders include: • Cook Industries, Inc. also known as Cook Grain Inc. (1975-1984) • Marubeni America (1978-1984)	See tenant agreements at Tab 2.

	• Pacific Coal Corporation (1982-1983) • STC Submarine Systems (now Alcatel Submarine Networks) (1988-2001)	
f. Historically Has Operated	Prior to the Port's acquisition, the Terminal 5 property was undeveloped. The Port conducted facility development from the 1960s through the 1990s. Dredged material from the Columbia and Willamette Rivers was placed on site in the 1960s to allow for development. Prior operators include: • Hall-Buck Marine, Inc. (1996-1998) (subsequently acquired by Kinder Morgan)	See aerial photographs at Tab 4.
5. Provide a brief summary of Respondent's relationship to each Property listed in response to Question 4 above, including the address, Multnomah County Alternative Tax lot Identification number(s), dates of acquisition, period of ownership, lease, operation, or affiliation, and a brief overview of Respondent's activities at the Properties identified.	The Port is the current owner of the Terminal 5 property described in response to Question 4 above. The dates of acquisition, periods of lease and discussion of operations are also provided in the response to Question 4. The addresses for Terminal 5, along with the Multnomah County Alternative Tax Lot Identification Numbers for each are as follows: <u>15540 N. Lombard (Tenex)</u> R708881910 <u>15550 N. Lombard (Portland Bulk Terminals)</u> R708881940 and R708881584 <u>15560 N. Lombard</u> R708881880, R708881590, R708881588, R708881870, R708881908, R708881900, R708881950, R708880036, R708882440, and R708881582 <u>15660 N. Lombard (Columbia Grain)</u> R708881600, R708882410 <u>15670 & 15750 N. Lombard (Tenex)</u> R708881960	See City of Portland Assessor information at Tab 5.
6. Identify any persons who concurrently with you exercises or exercised actual control or who held significant authority to control activities at each Property, including:	The Port tenants listed in the response to Question 4 have actual control over their leaseholds pursuant to the terms of their lease agreements.	See tenant agreements at Tab 2.
a. partners or joint venturers;	Not applicable.	
b. any contractor, subcontractor, or licensor that exercised control over any materials handling, storage, or disposal activity on the Property; (service contractors, remediation contractors, management and operator contractors, licensor providing technical support to licensed activities);	Materials handling at the Terminal 5 property is addressed in the tenant agreements. If the current tenants at Terminal 5 (Columbia Grain, Tenex and PBT) handle hazardous materials at their respective leaseholds it will be addressed in their respective 104(e) responses. Several discrete occurrences of materials handling and disposal have occurred at the Terminal 5 property and are	See Blue Lagoon documents at Tab 9, specifically: • GeoEngineers, 1996. Letter report entitled Excavation Activities, Terminal Five, "Blue Lagoon," Port of Portland, Portland, Oregon, July 15,

	described further in the responses to Questions 16, 17, 27 and 62. The contractors associated with those occurrences are as follows: • C. Wark Trucking of Tualatin, Oregon - excavated and transported 150 tons of debris material (asphalt, railroad ties, wood and vegetation) and sandblast grit near the Blue Lagoon in 1996. The material was transported to the Hillsboro Landfill. • Hahn and Associates, Inc. (HAI) – conducted removal of limited contaminated soils in 1988 and removal of sandblast grit in August 1995. • GeoEngineers – removed approximately 21 tons of remaining sandblast grit and approximately 145 tons of asphalt and wood debris in January 1996. (Hart Crowser, March 28, 2006). • Sunrise Express – Port's construction contractor for construction of the geotechnical surcharge pile in the late 1995/early 1996. Removed 100 tons of slag material that had been applied to access haul roads to the PBT storage building. See response to Question 16 (f) below. • West Coast Marine – transported non-hazardous soil exceeding background levels to Hillsboro Landfill during PBT building expansion and loop track construction.	1996. See site investigation documents at Tab 10, specifically: • Ash Creek Associates, Inc., 2007. Portland Bulk Terminal Expansion Construction Oversight – Soil and Groundwater Handling, September 14, 2007. See environmental site assessment and transaction-related reports at Tab 8, specifically: • Hart Crowser, 2006. Environmental Site Assessment (ESA)-Phase 1 and Mid-Lease Audit, March 28, 2006.
c. any person subleasing land, equipment or space on the Property;	The Port is the landowner and holds primary leases with three tenants. No subleases are currently in place.	See tenant agreements at Tab 2.
d. utilities, pipelines, railroads and any other person with activities and/or easements regarding the Property;	• Union Pacific Railroad • Burlington Northern and Santa Fe Railway Company • Portland General Electric (PGE) • City of Portland (water and sanitary sewer)	See easements at Tab 6.
e. major financiers and lenders;	The Port has issued revenue bonds under Port bond ordinances in connection with a number of the facilities at Terminal 5. The bonds are sold on the market, and the debt service is paid by the responsible Terminal 5 tenant. Repayment of the bonds is governed by the bond ordinance indenture and is managed by an appointed trustee.	See revenue bonds at Tab 7.
f. any person who exercised actual control over any activities or operations on the Property;	See response for 6 (b) above.	
g. any person who held significant authority to control any activities or operations on the Property;	See response for 6 (b) above.	
h. any person who had a significant presence or who conducted significant activities at the Property; and	See response for 6 (b) above.	
i. government entities that had proprietary (as opposed to regulatory) interest or involvement with regard to the activity on the Property.	Port of Portland	

7. Identify and describe any legal or equitable interest that you now have, or previously had in each Property. Include information regarding the nature of such interest: when, how, and from whom such interest was obtained; and when, how, and to whom such interest was conveyed, if applicable. In addition, submit copies of all instruments evidencing the acquisition or conveyance of such interest (e.g., deeds, leases, purchase and sale agreements, partnership agreements, etc.).	The Port is the current owner of the Terminal 5 property. The land that comprises Terminal 5 was originally owned by the State of Oregon State Land Board. Terminal 5 was part of the Leadbetter Estate, which was condemned by the Port and acquired from trustee Willamette University in 1965. The Port acquired certain filled portions of Terminal 5 from the State of Oregon in 1967. In 1975, the Port sold approximately 11.9 acres of the southernmost portion of Terminal 5 to Gilmore Steel, which is a predecessor of EOSM. In 1977, the Port sold 33.2 acres of the southern portion of the Terminal 5 property to Pacific Supply Cooperative. In 1980, the Port reacquired the 33.2–acre parcel from Cenex (the successor-in-interest to Pacific Supply Cooperative). In 1981, the Port reacquired the 11.9-acre parcel from EOSM.	See deeds and purchase and sale agreements at Tab 3.
8. If you are the current owner and/or current operator, did you acquire or operate the Property or any portion of the Property after the disposal or placement of hazardous substances, waste, or materials on, or at the Property? Describe all of the facts on which you base the answer to this question.	A portion of the current Terminal 5 property owned by the Port was historically used for disposal of materials by EOSM. Details on this former facility follows. A pond was historically present along the southern portion of the Terminal 5 and extended onto the EOSM property to the south. In 1975, EOSM purchased the southern portion of the Terminal 5 property from the Port and began drawing water from the pond to cool steel slag from their operations. The cooling water was then discharged back to the pond via a ditch. In addition, EOSM also used the pond for placement of manufacturing wastes, including slag, ceramic tubes, furnace bricks and steel. Lime leachate from steel slag placed in and around the pond by EOSM created alkaline conditions in the pond, with the pH of the pond water being between 9 and 11. The alkaline conditions promoted the precipitation of metal salts, resulting in amorphous, white sediment and suspended particles in clear green water. The pond's greenish hue resulted in it becoming referred to as the "Blue Lagoon." In 1981, in anticipation of the development of a coal handling facility at Terminal 5, the Port reacquired the southern portion of the property from EOSM, which included a portion of the Blue Lagoon (approximately 5 acres). EOSM had indicated to the Port that they considered the area surplus property, but that they still needed a place for slag disposal and, if given access, would provide slag as fill material. A rail loop installed during the development of the coal handling facility also crossed through the eastern portion of the pond, cutting it off from the remainder of the pond. Due to financial difficulties of the Pacific Coal Corporation, however, construction of the coal handling facility was never completed and was terminated in 1983. By that time, filling on the EOSM property had reduced the size of the pond from approximately six to approximately four acres, with the remaining pond acreage located solely on the Terminal 5 property. EOSM continued to use the pond for cooling water during that time period. In 1988, the Corps placed 1,200 cubic yards of sediments dredged from the navigation channel of the Willamette River in the vicinity of the Broadway Bridge into the Blue Lagoon. In 1992, the Port placed approximately 1,200 cubic yards of material dredged from Berth 501 in an unconfirmed upland area at Terminal 5. The Blue Lagoon was a designated placement area on the dredge/fill permit application for the Berth 501 dredging. EOSM continued to use the Blue Lagoon as a cooling water pond until 1994. In 1996, the Blue Lagoon was completely filled with sand obtained from clean surcharge material from other Port properties in Rivergate. Sediment samples collected from the Blue Lagoon indicated the presence of barium, copper, chromium, lead and zinc at concentrations above background; the other metals detected in the sediment were within the range of	See environmental site assessment and transaction-related reports at Tab 8. See Blue Lagoon records at Tab 9. See site investigation documents at Tab 10.

	background samples collected near the Site (Century West, 1994; PTI, 1995). Further information on the investigations of the pond and the recommendation for NFA by the DEQ is provided in the responses to Questions 27 and 67, below. EOSM, along with its contractor International Mill Service (IMS), operated an aggregate and slag processing facility at their property for a period of time at least in the mid to late 1990s (the product was marketed as "Slag-aggregate"). A sample of slag contained barium (295 mg/kg), chromium (3950 mg/kg), copper (133 mg/kg), and zinc (124 mg/kg) above background concentrations (Century West, 1994). In early 1995, the Port observed piles of slag and dolomite that were stored along the northern boundary of EOSM's property encroaching on the Terminal 5 property. The Port contacted EOSM in March 1995 and requested they correct the encroachment by June 1, 1995. EOSM moved the part of their slag pile that had gone over the property boundary and in January 1996 and agreed to conduct monthly inspections to ensure this did not reoccur. The monthly inspections were initiated in January 1996 and went through February 1997. EOSM sent the Port copies of their monthly inspection logs and reported on the conditions of the area. The inspections were concluded when EOSM's road construction and erosion control measures on the property line were complete. Copies of the monthly inspection reports are included at Tab 9.	
9. At the time you acquired or operated the Property, did you know or have reason to know that any hazardous substance, waste, or material was disposed of on, or at the Property? Describe all investigations of the Property you undertook prior to acquiring the Property and all of the facts on which you base the answer to this question.	The Port was aware that EOSM was using the Blue Lagoon described in Question 8 for cooling water before and after the acquisition. DEQ was reportedly aware of the disposal of slag and other materials into the Blue Lagoon. Only later were the sediments in the Blue Lagoon determined to contain barium, chromium, copper, lead, and zinc at concentrations above local background. As explained above, the Port took a series of actions to prevent EOSM from allowing slag to encroach onto its property. The Port has not yet found information on the investigation that was conducted prior to the Port's acquisition of the parcel from EOSM.	See environmental site assessment and transaction-related reports at Tab 8. See Blue Lagoon records at Tab 9.
10. Identify all prior owners that you are aware of for each Property identified in Response to Question 4 above. For each prior owner, further identify if known: a. City of Portland b. Freightliner LLC c. Oregon Shipbuilding Corporation d. Shipyard Commerce Center LLC e. Union Pacific Railroad; and f. West Coast Terminal Company For each prior owner, further identify, if known and if relevant, and provide copies of any documents you may have regarding: i. the dates of ownership ii. all evidence showing that they controlled access to the Property; and iii. all evidence that a hazardous substance, pollutant, or contaminant, was released or threatened to be	Prior owners include: • State of Oregon - Since 1859 • Leadbetter Estate – Prior to 1965 • Oregon Department of State Lands – Prior to 1967 • Gilmore Steel (now EOSM) - 1975-1981 • Pacific Source Cooperative – 1977-1978 • Cenex – 1978-1980 None of the entities listed in (a) through (f) Question 10 previously owned the Terminal 5 property. Periods of ownership are reflected by the deeds, which are attached at Tab 3. With regard to sub-bullet (iii), a summary of the Blue Lagoon is provided in the response to Question 8 above.	See deeds and purchase and sale agreements at Tab 3.

released at the Property during the period that they owned the Property.		
11. Identify all current or prior operators of the Property, including lessors, you are aware of for each Property identified in response to Question 4 above. For each such operator, further identify, if known and if relevant, and provide all documentation regarding, but not limited to the following: a. Beall Pipe, Inc.; b. Benson Industries, Inc.; c. Cargill, Inc.; d. Cascade General; e. Cascade West; f. Chevron USA; g. Classical Chinese Garden Trust; h. Hunt Foods, Inc. i. Kaiser; j. Multnomah County Sheriff's Office; k. Pacific Molasses Company; l. Pacific Pine; m. Port of Cascade Locks.; n. Portland Municipal Airport; o. Safety Kleen; p. Shaver Transportation Company; q. Speed Towing; r. St. John Auto Wrecking Yard; s. Thermo Pressed Laminates, Inc.; t. Tristar Transload, Inc.; u. U.S. Maritime Commission; v. Ultraboard; w. War Assets Administration; x. West Coast Paper Company; y. Western Transportation.; and z. Willamette Iron and Steel Corporation. For each such operator, further identify, if known and if relevant, and provide copies of any documents you may have regarding: i. the dates of operation; ii. the nature of prior operations at the property; iii. all evidence that they controlled access to the property; and iv. all evidence that a hazardous substance, pollutant, or contaminant was released or threatened to be released at or from the Property during the period that they operated on the Property.	Development of the terminal began in the mid-1970s. Prior to this, the property was undeveloped. None of the entities listed in (a) through (z) of Question 11 are known to have been prior operators of the Terminal 5 property, except Kaiser, as explained below. The following entities have leased and/or operated portions of Terminal 5 from the Port since 1975: • Alcatel Submarine Network (Alcatel). In 1988, Alcatel entered into a 30-year lease with the Port for approximately 16 acres for the purpose of manufacturing and exporting fiber optic submarine cable. All manufacturing was performed indoors and cable was loaded onto ships at Berth 502. Alcatel operated the facility from 1988 through 2001. The leasehold was not used from 2001 until 2006. In February 2006, Alcatel assigned its lease to Tenex. • Canpotex, Inc. is a guarantor for the lease with KMT for operation of the potash loading facility on the southern portion of the terminal. KMT is preparing its own 104(e) response and will provide details on its relationship with Canpotex. • Columbia Grain, Inc. is a current tenant at Terminal 5. They purchased an assignment of the lease interest from Cook Industries, Inc. in 1984 for the grain terminal. The lease area is comprised of approximately 43 acres and extends from December 1, 1984 to December 1, 2014 (30 years) with one five-year option to renew. • Cook Industries, Inc. also known as Cook Grain Inc. occupied the northern portion of the property from 1975 to 1978. In 1978 they subleased to Columbia Grain and subsequently transferred their lease to them in 1984. Activities at the site during their tenure included construction and operation of the grain elevator facility. • Hall-Buck Marine operated the mineral bulk handling facility on the southern portion of the property for Portland Bulk Terminals from 1996 to 1998. Hall-Buck Marine was subsequently acquired by Kinder Morgan Terminals, who currently operates the PBT facility at Terminal 5. The facility is used to transfer potash from railcar to ship for Canpotex. Railcars are delivered and picked up directly by the delivering railroad. Material is transferred from railcars into four hoppers with belt feeders under each hopper, feeding onto a cross-conveyor and then to the inclined conveyor leading to the ship loader tower. A multi-movement loading spout is capable of loading Panamax size vessels. The ship loading system is equipped with dust collection equipment, dust suppression baffles in the hoppers, and a cascade spout that is equipped with a "hula-skirt" to house a dust collection vacuum. Portland Bulk Terminal has developed BMPs to deal with loading dust suppression. Other environmental features include a cyclone baghouse system that collects dry material from operation equipment rather than having a wash-down system.	See tenant agreements at Tab 2.

- Kaiser International – Purchased equipment from the coal facility in 1988 and consolidated it on site for later removal.

- Marubeni America Corporation entered into a sublease and asset purchase agreement with Cook Grain for the grain elevator facility in 1978. Years of subleasing and facility operation were 1978 to 1984. Marubeni served as a guarantor for the operations. Cook entered into a Lease and Agreement with the Port dated July 20, 1973 for land, facility and equipment to be used as a grain elevator. Pursuant to an Agreement for Assignment of Lease dated December 10, 1975 between Cook and Columbia River Terminal Company (CRT), Cook assigned all of its right, title and interest in, to and under the Lease and Agreement to CRT and CRT assumed all of Cook's rights, duties and liabilities. The Port and CRT entered into a Lease dated July 13, 1977 covering certain premises to be used as a parking lot. The facility and equipment subject to the Lease and Agreement were financed by Public Grain Elevator Revenue Bonds, 1973 Series, Cook Industries, Inc. Project issued by the Port pursuant to Bond Ordinance No. 176, dated April 17, 1975. Under the Sublease and Asset Purchase Agreement, CRT subleased to Marubeni. Marubeni obtained an option to purchase all of rights, title and interest in the lease and equipment but did not exercise that option.

- Millbank Materials – related to Tenex. See Tenex 104(e) response for details on this relationship.

- Gilmore Steel (EOSM) owned and operated the southern portion of the property from 1975-1981 and operated the same property from 1981-1994 as a cooling water pond for steel slag (see the Blue Lagoon description in response to Question 8).

- Pacific Coal Corp. – executed a lease with the Port in 1982 and broke ground on construction of the coal handling facility on the southern portion of the property. The company experienced financial difficulties, however, and construction was terminated based on their inability to pay in 1983. The company was involuntarily dissolved by the State of Oregon in 1992.

- Pacific Supply Cooperative/Cenex – purchased a parcel in the southern portion of the terminal in 1977 for the purpose of developing a bulk transfer facility. Site preparation was initiated but was never completed. Cenex (the successor-in-interest to Pacific Supply) subsequently sold the parcel back to the Port in 1980.

- Portland Bulk Terminal (PBT) is a current tenant of Terminal 5. In 1996 PBT entered into a lease and operations arrangement with the Port and Hall-Buck Marine, Inc. to develop the southern portion of the site for use as a storage and distribution facility for bulk potash. In March 1997 transfer operations began. In 1998, Hall-Buck Marine was acquired by Kinder Morgan Energy Partners (now Kinder Morgan Terminals). In 2002, Canpotex purchased the ownership interest of KMEP in PBT. Portland Bulk Terminals is currently exporting potash, primarily to Asia. Potash is mainly used as a fertilizer base material, but is used as a dietary supplement, flavor enhancer, flavoring agent, gelling agent, nutrient, salt substitute, tissue softening agent, and yeast food, and is sometimes added to paint, artificially sweetened jelly and preserves, raw cuts on meat, and pharmaceuticals. In addition to potash, urea has also been handled. Urea is mainly used in fertilizer products.

  The facility is used to transfer potash from railcar to ship for Canpotex. Railcars are delivered and picked up

	directly by the delivering railroad. Material is transferred from railcars into four hoppers with belt feeders under each hopper, feeding onto a cross-conveyor and then to the inclined conveyor leading to the ship loader tower. A multi-movement loading spout is capable of loading Panamax size vessels. The ship loading system is equipped with dust collection equipment, dust suppression baffles in the hoppers, and a cascade spout that is equipped with a "hula-skirt" to house a dust collection vacuum. Portland Bulk Terminal has developed BMPs to deal with loading dust suppression. Other environmental features include a cyclone and bag house system that collects dry material from operation equipment rather than having a wash-down system. • STC Submarine Systems (now Alcatel Submarine Networks) signed a lease with the Port covering July 5, 1988 to June 15, 2018 (30 years) with two options to renew for ten years each. Activities conducted by STC/Alcatel included the manufacturing of submarine cable to be loaded onto cable-laying vessels at Berth 502. The lease area is approximately 17 acres. Alcatel ceased operations in 2001. In 2006 the lease was assigned to Tenex. • Tenex has been a tenant at Terminal 5 since February 2006 when Alcatel assigned its lease to Tenex. Tenex is a products warehouse and supplier, primarily to the steel industry. • United Western Supply Company – related to Tenex. See Tenex 104(e) response for details on this relationship.	
12. If not included in response to any of the previous questions, please describe the purpose and duration of each aquatic lands lease Respondent or the operator of Respondent's Property(ies) ever obtained from the State of Oregon and provide a copy of each application for and aquatic lands lease obtained.	Not applicable.	
Section 3.0 - Description of Each Property		
13. Provide the following information about each Property identified in response to Question 4:	See responses to 13 (a) through (m) below.	
a. property boundaries, including a written legal description;	The legal description is included on the boundary map for Terminal 5 which is at Tab 1.	See property boundary facility map at Tab 1.
b. location of underground utilities (telephone, electrical, sewer, water main, etc.);	The location of the following underground utilities are included on a figure at Tab 6: • PGE Utility easement – See attached agreements: 1969 Portland General Electric - Power Line Easements and 1976-028 Portland General Electric - Electric Power Line Permit, 1995 Portland General Electric Utility Easement - EP T5 1995 0008 00 0001 0 • Telco • US West • City of Portland water • City of Portland sanitary sewer	See easements and utility maps at Tab 6.

	• Stormwater pipes	
c. location of all underground pipelines whether or not owned, controlled or operated by you;	The location of the following underground pipelines are included on a figure at Tab 6: • City of Portland water • City of Portland sanitary sewer See the following at Tab 6: • City of Portland - Acceptance of Rivergate Sanitary Sewer (Agreement No. 1981-130) • City of Portland Ordinance 12792 • 1997 City of Portland Water and Sanitary Sewer Easement (drawing EP T5 1997 0003 00 0001 0) • 1988-192 Union Pacific Railroad - Pipeline Crossing Agreement (Agreement No. 1988-192)	See easements and utility maps at Tab 6.
d. surface structures (e.g.. buildings, tanks, pipelines, etc.);	The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide additional details for this question as it relates to their leaseholds. • Columbia Grain - Major structures on the Columbia Grain leasehold portion of the property include a grain storage building running east to west, two warehouses north of the grain elevator, two grain silos north of the elevator; two truck unloading buildings and an administration building south of the elevator; and two railcar unloading structures west of the elevator. A railroad loop encircles the Columbia Grain leasehold area. • Portland Bulk Terminals - The southern portion of the property was initially developed in 1981 by Riedel International as part of the coal facility that was never operational. Major features included a rotary car dumper and indexing system, a shiploader and sampling station, a dock, a stacker reclaimer, a conveying system and an unlined settling pond. The bulk storage building, rail pit, and railroad track loops were constructed in 1981. The main mineral storage building sits north to south on the property. A number of buildings are located east of the building including three offices near the entrance, a bottom dump building, lunch room, MCC building and two conveyors. West of the building is substation and another MCC building, a rotary dumper and a settling pond. North/northwest of the storage building is a third MCC building, a maintenance building, a lunch room and a two conveyors. A fourth MCC building is located on the dock at Berth 503. A loop track railroad encircles the PBT leasehold area. • Tenex - The Tenex leasehold area includes a large manufacturing building as well as two small outbuildings.	See facility maps at Tab 1.
e. over-water structures (e.g., piers, docks, cranes, etc.);	Three docks are located at Terminal 5 along the River: Berths 501, 502 and 503.	See facility maps at Tab 1.
f. dry wells;	No known drywells exist at the Terminal 5 property either currently or historically.	
g. treatment or control devices (e.g., surface water. air, groundwater, Resource Conservation and Recovery Act (RCRA), Transfer, Storage, or Disposal (TSD), etc.);	The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide details for this question as it relates to their leaseholds. The Port does not have any treatment or control devices at the Terminal 5 property.	

h. groundwater wells, including drilling logs;	According to the Preliminary Assessment, there is one on-site water supply well. This well was installed in 1982 to serve as a water supply for the construction of the coal export terminal that was being built but was never completed (and therefore was never operational). The well was constructed to a depth of 80 feet and had a reported yield of 150 gallons per minute. The current status of this well is unknown and it is not being used. Groundwater is not used as a drinking source; City water is available to the area. Temporary borings were installed related to groundwater monitoring for the Blue Lagoon: SS-1, SS-2, SS-3 by GeoTech in 1995; Monitoring wells MW-1, MW-2, MW-3, MW-4 were installed by Century West in 1993 and subsequently sampled a number of times from 1993-2006 (See Figure 2, Century West 1994 Preliminary Site Investigation). Currently only wells MW-2, MW-3, and MW-4 are accessible. On August 20, 1998, field personnel were unable to locate monitoring well MW-1. A survey to relocate the well revealed that the well was buried beneath a newly constructed railroad spur, suggesting that it had been inadvertently destroyed during rail construction.	See well documentation at Tab 12. See Blue Lagoon documentation at Tab 8. See investigation and cleanup documentation at Tab 10.
i. storm water drainage system, and sanitary sewer system, past and present, including septic tank(s) and where, when and how such systems are emptied and maintained;	The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide additional details for this question as it relates to their leaseholds. **Stormwater – General** Prior to the 1970s, the Terminal 5 property was undeveloped and no stormwater systems were located on the Property. As the three facilities were developed over time, stormwater drainage systems and/or features were put in place during construction. Generally, stormwater features at the Terminal 5 property include ditches, a settling pond, and pipes that connect to four outfalls located along the Willamette River. These four outfalls are designated as STSOUT011, STSOUT012, STSOUT013 and STSOUT 310. It should be noted that the Port's outfall designations recently changed, so those provided in response to the 104(e) request may not match the designations used in the reference documents. The information provided for this response is considered to be the most current and accurate. The following summarizes storm water information for each of the tenants currently operating at Terminal 5. The stormwater systems referenced below are maintained by the tenants; however, these systems are owned by the Port and therefore the tenants must manage discharges from these systems in accordance with the Port's MS4 permit requirements (DEQ NPDES Municipal Separate Storm Sewer System (MS4) Discharge Permit No. 101314), as well as any industrial NPDES permits they may have. See individual tenant 104(e) responses for additional information. **Portland Bulk Terminals.** The covered potash conveyance system has a conveyor washing system which discharges wastewater to the sanitary sewer. The PBT facility has a storm drain system that consists of two drainage basins (north and south) covering approximately 80 acres of the 100-acre leasehold. The southern basin covers approximately 70 acres, including 10 acres of paved roadway, 6 acres covered with the storage building, and 54 acres of unpaved surface that is primarily gravel (e.g., railroad ballast) or grass. Stormwater in the southern basin is directed towards surface ditches that lead to an approximately two acre settling pond. The pond discharges to a ditch that leads to a sedimentation manhole, a sampling manhole, and finally to outfall STSOUT013 (formerly known as RG13PP) on the Willamette River. The	See stormwater information at Tab 13. See easements at Tab 6. See site investigation documents at Tab 10, specifically: • Port of Portland, 2006. Letter to DEQ re: Stormwater Evaluation T-5 Upland Facility ECSI #1686. October 12, 2006.

	northern basin covers approximately six acres and is entirely paved or covered with small buildings. Stormwater in the northern basin drains to a perimeter ditch that discharges to the sampling manhole and then outfall STSOUT013 (formerly known as RG13PP). For reference, the City of Portland refers to this outfall as WR-388. It should be noted that in 2006-2007, the addition of a third loop to the railroad track at the PBT leasehold necessitated expanding and rerouting some stormwater ditches. **Tenex.** Over 80 percent of the Tenex parcel is paved or covered with the building. The facility has a storm drain system that collects almost exclusively the building roof drainage and discharges through one outfall, STSOUT012 (formerly known as STSOUT269), to the Willamette River. For reference, the City of Portland refers to this outfall as WR-165. **Columbia Grain.** The grain terminal covers approximately 43 acres and includes one berth on the Willamette River (Berth 501). The facility has about ten acres of paved surface area and two acres of buildings. A storm drain system consisting of catch basins and conveyance lines is present that collects storm water from the paved and building-covered areas of the facility. Unpaved areas do not drain to the storm drain and the storm water infiltrates in these areas. Storm water discharges to the Willamette River through two outfalls, STSOUT011 and STSOUT310 (formerly known as RG11PP and RG12PP, respectively). Both of the outfalls are monitored under Columbia Grain's current NPDES 1200-Z Stormwater Permit (see Columbia Grain's 104(e) response). Historically, two additional outfalls were located between the current STSOUT011 and STSOUT310. According to Columbia Grain, the additional outfalls used to drain the grain loading building and are no longer in service. See Columbia Grain's 104(e) response for additional information. For reference, the City of Portland refers to these two outfalls as WR-327 and WR-328. **Sanitary Sewer** City of Portland sanitary sewer lines were installed on the southern portion of the property initially in 1981 and later in 1988. as the northern and central portions of the property were developed. The sanitary sewer line is connected to a main trunk line located on N. Lombard Street. No septic systems are located or have been located on the Terminal 5 property. Acceptance agreements are included at Tab 6. For more information on the sanitary sewer lines at the Terminal 5 property, see the following at Tab 6: • City of Portland agreement number 1981-130 (City of Portland - Acceptance of Rivergate Sanitary Sewer) • City of Portland Ordinance 127920 • 1997 City of Portland Water and Sanitary Sewer Easement (Port Drawing EP T5 1997 0003 00 0001 0).	
j. subsurface disposal field(s), Underground Injection Control (UIC) wells, and other underground structures (e.g., underground storage tanks (USTs); and where they are located, if they are still used, and how they were closed; including, but not limited to, the tanks associated with the St. Johns Auto Wrecking Yard;	The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide additional details for this question on USTs as it relates to their leaseholds. The Port is not aware of any underground injection control wells on the Terminal 5 property. The Port does not own, currently or historically, any USTs on the property. The St. Johns Auto Wrecking Yard is not affiliated or proximal (either currently or historically) to the Terminal 5	See facility map at Tab 1. See tenant agreements at Tab 2.

	property.	
k. any and all major additions, demolitions or changes on, under or about the Property, its physical structures or to the Property itself (e.g., stormwater drainage, excavation work); and any planned additions, demolitions or other changes to the Property;	The Terminal 5 property was undeveloped prior to the 1970s. From 1964 to 1968, dredged material from the Willamette River was placed on the property, bringing its elevation to about 25 feet msl. From 1968 through 1973, dredged material from the Columbia River was placed on the property to bring it to its current elevation. Between 1970 and 1975, the property was cleared, but not developed. During this time, the shoreline was used for moorage of log rafts. Commercial development of the Terminal 5 property was conducted over a period of years on the three leasehold areas. The northernmost portion of the property was initially developed as a grain elevator facility in 1975. The grain facility originally consisted of a 1.5 million bushel storage capacity grain elevator with the capability to receive grain by barge, rail and truck. In 1981, the elevator was expanded to have a capacity of four million bushels. In addition, a rail-receiving pit was installed, and the configuration of the railroad track was changed. A central vacuum system for the thorough cleaning of the elevator was also installed. Major structures on this portion of the property include a grain storage building running east to west, two warehouses north of the grain elevator, two grain silos north of the elevator; two truck unloading buildings and an administration building south of the elevator; and two railcar unloading structures west of the elevator. A railroad loop encircles the leasehold area. The central portion of T5 was initially developed in 1988. A large manufacturing building was constructed on the leasehold property as well as two small outbuildings. As described in response to Question 8 above, a pond was historically located along the southern boundary of the Terminal 5 property. In 1975, EOSM purchased the southern portion of the property from the Port and began using water from the pond to cool steel slag from their operations. By 1983, filling on the EOSM property had reduced the size of the pond from six to approximately four acres. In 1988, the Corps placed 1,200 cubic yards of sediments dredged from the Willamette River beneath the Broadway Bridge into the Blue Lagoon. In 1992, the Port placed approximately 1,200 cubic yards of material dredged from Berth 501 in an upland area at Terminal 5. Because the Blue Lagoon was a designated disposal area on the dredge/fill permit application for the relevant time period of the Berth 501 dredging, it is possible that the material was placed there, but we are unable to confirm this. EOSM continued to use the Blue Lagoon as a cooling water pond until 1994. In 1995-96, the Port brought roughly 200,000 cubic yards of clean fill sand from several locations within Rivergate Industrial District for use as building pad surcharge material. Subsequently in 1996, the balance of the material was used to complete the filling of the Blue Lagoon. Development of the southern portion of the property was initiated in 1982 for use as a coal facility. Major features included a rotary car dumper and indexing system, a shiploader and sampling station, a dock, a stacker reclaimer, a conveying system and an unlined settling pond. Also at that time, a domestic well was also developed and installed at the site and the Union Pacific Railroad tracks that were present through the eastern portion of the property were realigned (EMCON, May 22, 1995). Construction on the facility was terminated in 1983, however, due to Pacific Coal Corporation's inability to pay for the project and therefore the facility was never operational.	See aerial photographs at Tab 4. See environmental site assessment and transaction-related reports at Tab 8, specifically: • Century West Engineering, 1993. Environmental Site Assessment (ESA) T5-Level 1. March 15, 1993. • Dames & Moore, 1988. Draft Final Report, Port of Portland, Property Transfer Environmental Assessment, Terminal 5 Cable Site, Portland, Oregon, prepared for the Port of Portland, Portland, Oregon, June 29, 1988. • Emcon, 1995. Phase 1, Environmental Site Assessment, Port of Portland, Terminal 5 Facility, Portland, Oregon, prepared for Hall-Buck Marine, Inc., May 22, 1995. • Hart Crowser, 1991. Environmental Assessment Report, Marine Terminal 5, Portland, Oregon, prepared for the Port of Portland, Portland, Oregon, August 12, 1991. • Port of Portland, 2000. Preliminary Assessment, September 5, 2000. • Hart Crowser, 2006. Phase 1 Environmental Site Assessment and Mid-Lease Audit Terminal 5 – Portland Bulk Terminals, March 28, 2006. See Blue Lagoon records at Tab 9. See site investigation documents at Tab 10, specifically: • Ash Creek Associates, Inc., 2007. Portland Bulk Terminal Expansion Construction Oversight – Soil and Groundwater Handling, September 14, 2007.

	In 1996, Portland Bulk Terminals LLC signed a lease to lease the land and construct the mineral bulk export facility. Also in 1996, PBT entered into a lease and operations arrangement with the Port and Hall-Buck Marine, Inc. to redevelop the southern portion of Terminal 5 for use as a storage and distribution facility for bulk potash (Port, 1996c). In order to accommodate a rail loop for the facility, the Blue Lagoon was filled (see response to Question 8). The bulk storage building, rail pit, and railroad track loops were constructed. The settling pond was used as a stormwater retention pond. The main mineral storage building is oriented north to south on the property. A number of buildings are located east of the building including three offices near the entrance, a bottom dump building, lunch room, MCC building and two conveyors. West of the building is a substation and another MCC building, a rotary dumper and a settling pond. North/northwest of the storage building is a third MCC building, a maintenance building, a lunch room and a two conveyors. A fourth MCC building is located on the dock at Berth 503. A loop track railroad encircles the PBT leasehold area. The Port dismantled and removed the stacker/reclaimer system developed for the planned coal facility in April 2005. In 2006-2007, PBT expanded the storage building at its leasehold. During the same timeframe, the Port oversaw the addition of a third loop to the railroad track. This work necessitated expanding and rerouting some stormwater ditches. The sale and removal of the rotary car dumper is planned for 2008. In preparation of the storage building expansion, soil from the stacker/reclaimer berm (consisting of soil capped with ballast rock) and from the grass field southeast of the Storage Building were used as geotechnical surcharge. Prior to their use as surcharge material the chemical quality of these soils was assessed through laboratory analysis. Three samples were initially collected by the Port from the berm and analyzed for hydrocarbon identification, PAHs, PCBs and 13 priority pollutant metals. Due to elevated zinc in one sample, 10 additional samples were collected by Hart Crowser and analyzed for zinc. Some of the samples contained zinc above background concentrations, however, Hart Crowser determined that the material did not to pose a human health or ecological concern and was suitable for use as surcharge material. This material was incorporated into the base of the surcharge pile and with settlement, ultimately served as the base material upon which the building was constructed. Three samples were collected from the east area. One sample was previously collected from this area and tested in 1993 and five in 1995. Analysis included TPH, PAHs, PCBs, organochlorine pesticides, chlorinated hebicides, and total and leachable metals. No constituents were detected above PRGs or SLVs and metals were consistent with background concentrations. Soil from the east area was used in the mid- to upper portions of the surcharge pile. This material was ultimately returned to the borrow area.	
l. all maps and drawings of the Property in your possession; and	Relevant maps and drawings are described in response to specific questions and are noted throughout this response.	
m. all aerial photographs of the Property in your possession.	Representative aerial photographs are included at Tab 4.	See aerial photographs at Tab 4.
14. For Properties adjacent to the Willamette River, provide specific information describing the river-ward boundary of private ownership and where state aquatic lands and/or state-management jurisdiction begins. Provide a map that delineates the river-ward boundary of each Property.	The Port believes that its ownership of the Terminal 5 property extends riverward to the line of ordinary high water as reflected in the Port's 1967 and 1987 settlements with the State of Oregon. See attached draft map at Tab 1 and settlement agreements at Tab 3.	See property boundary map at Tab 1. See deeds and purchase and sale agreements at Tab 3.

15. For each Property, provide all reports, information or data you have related to soil, water (ground and surface), or air quality and geology/hydrogeology at and about each Property. Provide copies of all documents containing such data and information, including both past and current aerial photographs as well as documents containing analysis or interpretation of such data.	The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide additional details for this question on USTs as it relates to their leaseholds. Relevant information from the Port's records is contained within the tabs described in the references in the next column.	See aerial photographs at Tab 4. See environmental site assessment and transaction-related reports at Tab 8. See Blue Lagoon records at Tab 9. See site investigation documents at Tab 10. See surcharge material information at Tab 11. See stormwater documentation at Tab 13. See wetland documentation at Tab 14. See dredging records at Tab 15. See permits at Tab 17. See spill records at Tab 18.
16. Identify all past and present solid waste management units or areas where materials are or were in the past managed, treated, or disposed (e.g., waste piles, landfills, surface impoundments, waste lagoons, waste ponds or pits, tanks, container storage areas, etc.) on each Property. For each such unit or area, provide the following:	Based on the review of available records, five areas on the Terminal 5 property were used for the management and/or disposal of materials including: 1. Blue Lagoon 2. Wetland fill area 3. Geotechnical surcharge piles on the PBT leasehold 4. Debris piles 5. Construction Piles for PBT Expansion These areas are described in bullet (c) below.	See environmental site assessment and transaction-related reports at Tab 8, specifically: • Emcon, 1995. Phase I Environmental Site Assessment. May 22, 1995 (debris stockpiles are shown in the figures). See Blue Lagoon records at Tab 9. See site investigation documents at Tab 10. See surcharge material information at Tab 11. See wetland documentation at Tab 14.
a. a map showing the unit/area's boundaries and the location of all known units/areas whether currently in operation or not. This map should be drawn to		See environmental site assessment and transaction-related reports at Tab 8, specifically:

scale, if possible, and clearly indicate the location and size of all past and present units/areas;		• Emcon, 1995. Phase I Environmental Site Assessment. May 22, 1995 (debris stockpiles are shown in the figures). See Blue Lagoon records at Tab 9. See site investigation documents at Tab 10. See surcharge material information at Tab 11. See wetland documentation at Tab 14.
b. dated aerial photograph of the site showing each unit/area;	Representative aerial photographs for the Terminal 5 property are included at Tab 4.	See aerial photographs at Tab 4.
c. the type of unit/area (e.g., storage area. landfill, waste pile. etc.), and the dimensions of the unit/area;	1. Blue Lagoon – As described in the response to Question 8 above, the Blue Lagoon ranged in size over time, decreasing from approximately six to approximately four acres. The pond was not entirely located on Terminal 5 property; a portion (approximately 1-2 acres) was located on the northern portion of the adjacent property owned by EOSM. The depth of the pond was approximately 8 feet. 2. Wetland Fill Area - In June 1995, the Port submitted an application to the Corps and the State of Oregon for a permit to fill 12.49 acres of jurisdictional wetlands on Terminal 5. The application was approved in 1997 and the wetlands were subsequently filled under Permit No. 9836. The permit was renewed on October 5, 1998 and expired in October 1999. In order to mitigate the filling of these wetland areas, the Port agreed to restore approximately 10.5 acres of historic emergent wetlands on a separate Port-owned property about one mile south of Terminal 5. Mitigation consisted of removing fill material and planting native vegetation. The primary goals of the mitigation program are to diversify wildlife habitat and enhance a wildlife corridor between the Willamette River and the Columbia Slough near Smith-Bybee Lakes. A five-year monitoring plan was developed by the Port to monitor the wetland mitigation work. 3. Geotechnical Surcharge Pile – Approximately 200,000 cubic yards of clean sand for use as surcharge material was placed at Terminal 5 in late 1995/early 1996. The material was planned for use at the PBT potash storage building, and for fill in the wetland areas and Blue Lagoon described above. 4. Debris Piles - A debris pile was formerly located adjacent and east of the Blue Lagoon and consisted of inert materials such as asphalt, concrete, soil and rock. Several piles of sandblast grit were also present, which had been used at and transported from Terminal 6. 5. Construction Piles for PBT Expansion - To address soil handling in the area of the Blue Lagoon described in response to Question 8 above, the Port developed a contaminated media management plan (CMMP). The CMMP provides procedures for managing the soil and groundwater within the Blue Lagoon area to mitigate exposure. In the event of disturbance of soil with the Blue Lagoon area, the CMMP requires soil to be characterized to determine appropriate handling and disposal requirements. Final disposition of the soil shall be as follows: • No restriction if contaminant concentrations are less than background for metals and below method reporting limits for organics;	See environmental site assessment and transaction-related reports at Tab 8, specifically: • Emcon, 1995. Phase I Environmental Site Assessment. May 22, 1995 (debris stockpiles are shown in the figures). See Blue Lagoon records at Tab 9. See site investigation documents at Tab 10. See surcharge material information at Tab 11. See wetland documentation at Tab 14.

	• Re-use on Terminal 5 (but not in a manner that could erode into storm water facilities) if contaminant concentrations are above background but less than industrial screening levels; or • Dispose of in a licensed landfill if at least one contaminant concentration exceeds industrial screening levels. In 2007, PBT (see description of PBT in response to Question 11) expanded the potash export facility at T5. The facility expansion extended into the area of the former Blue Lagoon, so the CMMP was implemented during the project work. Soil was generated during utility pole installations; rail expansion; building foundation construction; and utility installation. All soil excavated from within the former Blue Lagoon area was stockpiled within covered roll-off boxes or on plastic pending analytical testing. All results analytical results were below background concentrations except for the following: • A total of approximately 36 cubic yards of soil from the utility pole installations and rail expansion work contained metals above background and/or detectable PCBs and were disposed of in an off-site Subtitle D landfill. • About 700 cubic yards of soil from the rail expansion contained barium above background concentrations but below industrial screening levels. The soil was placed as shown on the aerial photograph in Attachment B in the "Portland Bulk Terminals Expansion Construction Oversight" report prepared by Ash Creek dated September 14, 2007.	
d. the dates that the unit/area was in use;	1. Blue Lagoon - The Blue Lagoon was used by EOSM from 1975 through 1994. 2. Wetland Fill Area – The 12.5-acre wetland fill area was permitted between 1997 and 1999. 3. Geotechnical Surcharge Pile - The geotechnical surcharge pile was constructed in late 1995/early 1996. 4. Debris Piles - The period of use is unknown, but the Port issued a letter in 1990 calling for its discontinuation. 5. Construction Piles for PBT Expansion - The PBT construction work was completed between June 2006 and June 2007.	See environmental site assessment and transaction-related reports at Tab 8, specifically: • Emcon, 1995. Phase I Environmental Site Assessment. May 22, 1995 (debris stockpiles are shown in the figures). See Blue Lagoon records at Tab 9. See site investigation documents at Tab 10. See surcharge material information at Tab 11. See wetland documentation at Tab 14.
e. the purpose and past usage (e.g., storage, spill containment, etc.);	1. Blue Lagoon – Water from the Blue Lagoon was originally used to cool steel slag from EOSM's manufacturing operations. They also disposed of certain materials including used ceramic tubes, furnace brick, steel and slag. Ultimately the filling of the pond was required due to the expansion of the PBT facility to make way for a new building. 2. Wetland Fill Area - The upland areas where the fill occurred were originally wetlands. 3. Geotechnical Surcharge Pile – The surcharge material was planned for use at the PBT potash storage building, and for fill in the wetland areas and Blue Lagoon described above. The area where the geotechnical surcharge was placed was originally undeveloped land. 4. Debris Piles – The debris piles were used generally for construction debris, including asphalt, concrete, soil and	See environmental site assessment and transaction-related reports at Tab 8, specifically: • Emcon, 1995. Phase I Environmental Site Assessment. May 22, 1995 (debris stockpiles are shown in the figures). See Blue Lagoon records at Tab 9.

	rock. An area of sandblast grit was also present. Prior to this use, the area of the debris piles was originally undeveloped land. 5. Construction Piles for PBT Expansion - The construction piles consisted of excess soil resulting from construction of the new facilities. The soil was placed on the site in unused areas of the facility (see response to Question 16 (c) above).	See site investigation documents at Tab 10. See surcharge material information at Tab 11. See wetland documentation at Tab 14.
f. the quantity and types of materials (hazardous substances and any other chemicals) located in each unit/area and;	1. Blue Lagoon – The quantity of materials placed in the Blue Lagoon over time is unknown; the response to question 8 provides the estimated quantities of materials placed in the former pond. Materials placed in the pond by EOSM for disposal include ceramic tubes, furnace brick, steel and slag. Also, in 1985, about 10-12, half-buried 55-gallon drums were observed by the Port along the pond banks. Crowley Environmental collected a sample from the drums (along with two water samples from the lagoon) in 1985 and had it analyzed for metals (methodology unknown). Four metals were detected, including cadmium (0.123 mg/l), chromium (0.115 mg/l), mercury (0.154 mg/l) and zinc (0.405 mg/l). It was determined that the drums had been used to transport railroad spikes and tie plates during the Pacific Coal Terminal construction and had not contained liquid or dry bulk products. The drums were subsequently removed, however, the disposal location is not known. In 1993, it was reported that weathered slag, sometimes mixed with scrap metal, was piled around the perimeter of the pond. In 1995, a geophysical survey conducted around the lagoon found the west end contained substantial amounts of metallic debris (e.g., steel reinforcing bar, pipes, and metal strapping), as well as reinforced concrete blocks and other construction debris. The geophysical survey also revealed that the eastern and southern portions of the pond were filled with slag that also contained large pieces of metallic debris. Metallic debris was not found in the northern and central portions of the lagoon. Sandblast grit was also present along the eastern portion of the pond, although the exact dates are unknown. The sandblast grit was sampled and analyzed for Toxicity Characteristic Leaching Procedure (TCLP) metals to determine if the material would classify as a hazardous waste. None of the samples were found to contain TCLP metals above regulatory thresholds and the material was determined to be non-hazardous (Hahn and Associates, Inc., 1995). Some of the sandblast grit was removed from the Blue Lagoon in 1995. In 1992, the Port placed approximately 1,200 cy of material dredged from Berth 501 in an upland area at Terminal 5. Because the Blue Lagoon was a designated placement area on dredge/fill permit applications for the relevant time period of the Berth 501 dredging, it is presumed the material was placed there. 2. Wetland Fill Area – The fill material placed in the 12.5 acres of wetlands under fill permit No. 9836 was clean sand. The quantity of material estimated to fill this area is identified in the permit application as 120,000 cubic yards. 3. During construction of the geotechnical surcharge pile in late 1995/early 1996 for the PBT potash storage building, the construction contractor (Sunrise Express) used about 200 cy of EOSM steel slag for stabilizing access haul roads to the pile. This caused concern to the Port based on the presence of heavy metals in the steel slag; specifically chromium at concentrations of 4,000 mg/kg. The Port requested removal of the material, however, the contractor could only remove approximately 100 cy of the slag. After further evaluation, the residual volume of slag (100 cy) was determined not to pose a threat as the metals were not leachable, and homogenization with the 200,000 cy of surcharge material rendered concentrations to levels not posing a risk. The residual slag/surcharge soils were then used as fill material in the Blue Lagoon.	See environmental site assessment and transaction-related reports at Tab 8, specifically: • Emcon, 1995. Phase I Environmental Site Assessment. May 22, 1995 (debris stockpiles are shown in the figures). See Blue Lagoon records at Tab 9. See site investigation documents at Tab 10. See surcharge material information at Tab 11. See wetland documentation at Tab 14.

	4. Debris Piles – In August 1995, Hahn & Associates removed approximately 503 tons of sandblast grit for disposal at the Hillsboro Landfill in Hillsboro, Oregon. Some grit was temporarily left adjacent to the Blue Lagoon because it was inside the wetland boundaries. After receipt of the wetland fill permit, GeoEngineers removed approximately 21 tons of the remaining grit and approximately 145 tons of asphalt and wood debris in January 1996, hauling it to Hillsboro Landfill. 5. Construction Piles for PBT Expansion - Approximately 700 cubic yards of soil excavated during the PBT expansion contained metals above background concentrations defined in the CMMP and left on T5 (see response to Question 16c above). The metals detected above the CMMP background were barium (up to 70 mg/kg), chromium (up to 31 mg/kg), and lead (up to 47 mg/kg). Approximately 30 cubic yards of soil excavated during the PBT expansion were disposed of at the Hillsboro landfill. The soil contained concentrations of PCBs (up to 0.05 mg/kg), barium (up to 73 mg/kg), chromium (up to 332 mg/kg), and lead (up to 34 mg/kg) above CMMP background levels.	
g. the construction (materials, composition), volume, size, dates of cleaning, and condition of each unit/area.	1. The Blue Lagoon was a naturally occurring pond. 2. The wetlands were naturally occurring prior to the permitted filling in 1997. 3. The geotechnical surcharge area was approximately 200,000 cubic yards in volume. 4. The extent and quantity of the debris piles is not known. 5. Construction Piles for PBT Expansion - The construction piles were placed on Terminal 5 at the locations shown on the aerial photograph in Attachment B in the "Portland Bulk Terminals Expansion Construction Oversight" report prepared by Ash Creek dated September 14, 2007.	See environmental site assessment and transaction-related reports at Tab 8, specifically: • Emcon, 1995. Phase I Environmental Site Assessment. May 22, 1995 (debris stockpiles are shown in the figures). See Blue Lagoon records at Tab 9. See site investigation documents at Tab 10. See surcharge material information at Tab 11. See wetland documentation at Tab 14.
17. If the unit/area described above is no longer in use, how was such unit/area closed and what actions were taken to prevent or address potential or actual releases of waste constituents from the unit/area.	1. The Blue Lagoon was filled in 1996 by the Port, effectively preventing exposure to the impacted Blue Lagoon materials and pond sediment. Analysis of the slag material and surface sediments in the pond detected concentrations of metals and PCBs. Based on the detected concentrations compared with applicable regulatory criteria and their relative immobility in the environment, it was determined the materials could remain in place. A CMMP was prepared providing procedures for managing the soil to mitigate exposure. Groundwater in a limited area around the pond contains barium, iron, and zinc at concentrations above aquatic SLVs; however, groundwater monitoring demonstrated that these constituents would not migrate to the Willamette River, the nearest surface water body and the CMMP provides management procedures so that the groundwater is appropriately handled if accessed during future site development activities. A copy of the CMMP is included in Tab 10. 2. The wetlands were filled with clean material and are currently developed with structures and infrastructure on the PBT leasehold property. As such there was no need to address releases of waste constituents from the filled	See environmental site assessment and transaction-related reports at Tab 8, specifically: • Emcon, 1995. Phase I Environmental Site Assessment. May 22, 1995 (debris stockpiles are shown in the figures). See Blue Lagoon records at Tab 9. See site investigation documents at Tab 10. See surcharge material information at Tab 11.

	wetlands. 3. The geotechnical surcharge area is currently developed with PBT facility structures and infrastructure. The steel slag partially used as the fill was subsequently removed (half of the 200 cy). After further evaluation, the residual volume of slag (100 cy) was determined not to pose a threat as it was not leachable, and homogenization with the 200,000 cy of surcharge material rendered concentrations to levels not posing a risk. The residual slag/surcharge soils were then used as fill material in the Blue Lagoon. 4. The debris piles were removed and taken to the Hillsboro Landfill for disposal. Some sandblast grit was left adjacent to the Blue Lagoon because it was inside the wetland boundaries and was subsequently covered and filled with clean sand material from the surcharge pile (described above). 5. Construction Piles for PBT Expansion - The construction piles were placed on T5 at the locations shown on the aerial photograph in Attachment B in the "Portland Bulk Terminals Expansion Construction Oversight" report prepared by Ash Creek dated September 14, 2007.	See wetland documentation at Tab 14.
18. For each Property, provide the following information regarding any current or former sewer or storm sewer lines or combined sanitary/storm sewer lines, drains, ditches, or tributaries discharging into the Willamette River:	The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide details for this question as it relates to operations at their leaseholds.	
a. the location and nature of each sewer line, drain, ditch, or tributary;	A general description of the stormwater systems present at the Terminal 5 property is provided in response to Question 13 above.	
b. the date of construction of each sewer line, drain, ditch, or tributary;	Storm water lines and ditches, and sanitary sewer lines were initially constructed at the Columbia Grain facility in 1974-75, on the southern portion of the property in 1974 and 1983, and on the central and northern portions of the property in 1988 and 1997. Modifications to the storm water system were made during the construction of the PBT Loop Expansion in 1996.	See facility drawings at Tab 1. See easements and utility information at Tab 6.
c. whether each sewer line, or drain was ever connected to a main trunk line;	The sanitary sewer lines connect to a main trunk line located in N. Lombard Ave.	See easements and utility information at Tab 6.
d. whether each sewer line, drain, ditch, or tributary drained any hazardous substance, waste, material or other process residue to the Willamette River; and	In 1996, the Port requested modification of NPDES permit No. 101377 to cover treated lagoon effluent as well as treated runoff from the bulk storage facility. The permit application also requested minimal and sporadic discharges of water, product, and small amounts of dust during regular wash-down activities. The DEQ approved this permit modification on August 5, 1997 (DEQ, 1997). This permit also specified that the permittee must notify the DEQ for potash spills greater than 0.5 cubic meters if handling any materials other than potash. Currently, process residue from PBT operations drains into the stormwater retention pond on site. The management of stormwater from this pond is further discussed below in bullet (e) (i).	See Blue Lagoon information at Tab 9. See permit information at Tab 17.
e. any documentation regarding but not limited to the following on any and all outfalls to the Willamette River which are located within the boundaries of the Property(ies). Your response should include, but not be limited to:	See response in sub-bullets (i) through (ii) below.	
i. the areas serviced by the outfalls; and	Four stormwater outfalls are located on the Terminal 5 property and drain the three leasehold areas. These four outfalls are designated as STSOUT011, STSOUT012, STSOUT013 and STSOUT 310. It should be noted that the Port's outfall designations recently changed, so those provided in response to the 104(e) request may not match the designations used in the reference documents. The information provided for this response is considered to be the most current and accurate.	See site investigation documents at Tab 10, specifically: • Port of Portland, 2006. Letter to DEQ re: Stormwater Evaluation T-5 Upland Facility ECSI #1686. October 12, 2006.

	Portland Bulk Terminals. Bulk minerals arrive at the facility in rail cars and are loaded into a covered storage building and then to ships at Berth 503 via conveyors. The covered conveyance system is equipped with dust suppression and collection equipment. The conveyor washing system discharges to the sanitary sewer. The PBT facility has a storm drain system that consists of two drainage basins (north and south) covering approximately 80 acres of the 100-acre leasehold. The southern basin covers approximately 70 acres, including 10 acres of paved roadway, 6 acres covered with the storage building, and 54 acres of unpaved surface that is primarily gravel (e.g., railroad ballast) or grass. Stormwater in the southern basin is directed towards surface ditches that lead to an approximately two acre settling pond. The pond discharges to a ditch that leads to a sedimentation manhole, a sampling manhole, and finally to outfall STSOUT013 (formerly known as RG13PP) on the Willamette River. The northern basin covers approximately six acres and is entirely paved or covered with small buildings. Stormwater in the northern basin drains to a perimeter ditch that discharges to the sampling manhole and then outfall STSOUT013 (formerly known as RG13PP). For reference, the City of Portland refers to this outfall as WR-388. It should be noted that in 2006-2007, the addition of a third loop to the railroad track at the PBT leasehold necessitated expanding and rerouting some stormwater ditches. **Tenex.** Over 80 percent of the Tenex parcel is paved or covered with the building. The facility has a storm drain system that collects almost exclusively the building roof drainage and discharges through one outfall, STSOUT012 (formerly known as STSOUT269), to the Willamette River. For reference, the City of Portland refers to this outfall as WR-165. **Columbia Grain.** The grain terminal covers approximately 43 acres and includes one berth on the Willamette River (Berth 501). The facility has about ten acres of paved surface area and two acres of buildings. A storm drain system consisting of catch basins and conveyance lines is present that collects storm water from the paved and building-covered areas of the facility. Unpaved areas do not drain to the storm drain and the storm water infiltrates in these areas. Storm water discharges to the Willamette River through two outfalls, STSOUT011 and STSOUT310 (formerly known as RG11PP and RG12PP, respectively). Both of the outfalls are monitored under Columbia Grain's current NPDES 1200-Z Stormwater Permit. Historically, two additional outfalls were located between the current STSOUT011 and STSOUT310. According to Columbia Grain, the additional outfalls used to drain the grain loading building and are no longer in service. See Columbia Grain's 104(e) response for additional information. For reference, the City of Portland refers to these outfalls as WR-327 and WR-328.	See stormwater information at Tab 13.
ii. the type of outfall (i.e., storm water or single facility operational).	All four of the outfalls are dedicated to stormwater.	
19. Provide copies of any stormwater or property drainage studies, including data from sampling, conducted at these Properties on stormwater, sheet flow, or surface water runoff. Also provide copies of any Stormwater Pollution Prevention or Maintenance Plans or Spill Plans developed for different operations during the Respondent's operation of each Property.	• Information on Terminal 5 drainage basins, and storm water system were provided in the September 7, 2000 Terminal 5 PA and supplemented in a letter from the Port to DEQ dated August 31, 2001. See attached October 12, 2006 letter to Mr. Tom Gainer, DEQ from the Port Re: Storm Water Evaluation Terminal 5 Upland Facility ECSI No. 1686. It should be noted that the Port's outfall designations recently changed, so those provided in response to the 104(e) request may not match the designations used in the reference documents. The information provided for this response is considered to be the most current and accurate. • A Storm Water Management Prevention Plan was developed by the Port in support of the NPDES Municipal	See site investigation documents at Tab 10, specifically: • Port of Portland, 2000. Preliminary Assessment, September 5, 2000. • Port of Portland, 2006. Letter to DEQ re: Stormwater Evaluation T-5 Upland Facility ECSI #1686. October 12, 2006.

	Separate Sewer System (MS4) permit on which the Port is a co-permittee with the City of Portland and Multnomah County. Columbia Grain and KM/PBT have their own permits and SWPPPs for their operations. See individual tenant 104(e) responses for more information. • Spill response plans have been developed by the tenants (where applicable) and are included in their separate 104(e) responses. • For the storage building expansion, a 1200-C NPDES Construction General Stormwater Permit was obtained by the general contractor (Westmar Consultants Corp.) that was retained by Portland Bulk Terminals. An erosion and sediment control plan, approved by DEQ, was developed, submitted, and fully implemented prior to initiating on site activities. The plan included 1) a narrative site description, 2) site maps and construction plans, and 3) erosion and sediment control best management practices (BMPs) including wet weather BMPs, runoff controls, erosion prevention methods, sediment controls, and non-stormwater controls including stockpile erosion and sediment control. • The third track expansion was conducted under the Port of Portland's 1200-CA construction general stormwater permit. Erosion and sediment control measures were incorporated into the engineering design specifications (Section 2370) and drawings and implemented prior to and during construction.	• Port of Portland, 2007. Draft Responses to EPA Comments on DEQ Source Control Decision (EPA Letter to DEQ 6/29/07). See stormwater information at Tab 13.
Section 4.0 - Respondent's Operational Activities		
20. Describe the nature of your operations or business activities at each Property. If the operation or business activity changed over time, please identify each separate operation or activity, the dates when each operation or activity was started and, if applicable, ceased.	The Port has been the land owner of Terminal 5 since 1965 and acts as property manager for the three tenants currently leasing facilities at the terminal. Activities performed by or contracted by the Port at the terminal include facility development, general grounds maintenance, and management of lease agreements/right-of-ways with utilities and the Union Pacific Railroad. The Port also has maintenance responsibility for the dock and access ramp to Berth 503 (fender system, maintenance dredging, concrete repair) and some maintenance dredging responsibilities at Berth 501 and 502. The Port has historically provided some grounds maintenance (landscaping) within the Terminal 5 PBT facility.	
21. At each Property, did you ever use, purchase, generate, store, treat, dispose, or otherwise handle any waste, or material? If the answer to the preceding question is anything but an unqualified "no," identify:	The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide details for this question as it relates to their leaseholds. 1. **Blue Lagoon** - The Blue Lagoon was a body of water used by Evraz Oregon Steel Mills (EOSM) as a source of cooling water from the 1980s up until early 1994. EOSM used water from the Blue Lagoon to cool slag; water was returned to the lagoon via a drainage ditch located on EOSM property. The Blue Lagoon was approximately 4 acres in size. It was contiguous with the southwestern margin of Terminal 5. The lagoon property was originally owned by the Port. In 1975, EOSM purchased the lagoon property. The Port subsequently repurchased the lagoon property in 1981. However, EOSM continued to use the lagoon until 1994. As of 1985, the banks and bottom of the Blue Lagoon were covered with a fine, white, powder-like material and the water was crystal clear with a distinctive green tinge. When EOSM first started operating the lagoon was twice the size it was in 1985 and it extended further in a southerly direction. In 1988, the Corps placed 1,200 cy of sediments dredged from the Willamette River beneath the Broadway	See environmental site assessment and transaction-related reports at Tab 8. See Blue Lagoon records at Tab 9. See investigation and cleanup records at Tab 10. See dredging records at Tab 15.

Bridge into the Blue Lagoon (Century West, 1994 and interview with Sebastian Degens).

A geophysical survey conducted around the lagoon found that metallic debris (e.g., steel reinforcing bar, pipes, metal strapping, and construction debris) were present near the west end and southern and eastern portions of the lagoon. Metallic debris was not detected in the northern and central portions of the lagoon.

Also, in 1995, the Port removed 503.53 tons of apparent sandblast grit material that was placed near the Blue Lagoon. The grit may have originated from sandblasting activities conducted at Terminal 6. The apparent sandblast grit was sampled and analyzed for Toxicity Characteristic Leaching Procedure (TCLP) metals to determine if the material would classify as a hazardous waste. None of the samples were found to contain TCLP metals above regulatory thresholds. The apparent sandblast grit materials were excavated and transported to the Hillsboro Landfill for disposal under Oregon Special Waste permit number 2396. The remainder of the apparent sandblast grit material was left at the site because these materials were within the boundaries of a jurisdictional wetland.

In 1996, after receiving the wetland fill permit, the Port removed an additional 20.52 tons of sandblast grit and 145.43 tons of debris consisting of asphalt, railroad ties, wood and vegetation. The materials were transported to Hillsboro Landfill for disposal under Oregon Special Waste permit number 2396.

In May of 1996, the Port began filling the Blue Lagoon with sand from a pile of fill material placed on the property as surcharge (same material characterized in 1995 – see discussion above). Water displaced by filling was pumped through a pH adjustment system to a settling pond before being discharged to the Willamette River under NPDES Waste Discharge Permit No. 70613. Discharge monitoring performed by the Port in accordance with the Permit found that turbidity levels were above discharge limits. The Port made several attempts to reduce turbidity levels. The Port ultimately requested and obtained DEQ's approval to pump water from the Blue Lagoon onto the sand pile to pre-wet it prior to placement in the Lagoon.

2. **Dredged Material and other On-site Fill** - The property was filled with silty sand from the Willamette River over a period of time from 1964 to 1968, bringing it to elevation +25 feet (see 1967 aerial photograph). From 1968 to 1973, successive fills with Columbia River sand raised the site to its present elevation of approximately 34 feet CRD (see 1974 aerial photograph). In 1977, the southerly portion of the property was sold to Pacific Supply Cooperative. That area was subsequently surcharged with 191,000 CY of material borrowed from the filled land immediately to the north (Port, 2000 – PA). The dredged material is relatively uniform, predominantly medium to coarse-grained sand.

   In 1992, the Port placed approximately 1,200 cy of material dredged from Berth 501 in an upland area at Terminal 5 (Port, 2000). Because the Blue Lagoon was a designated placement area on dredge/fill permit applications for the relevant time period of the Berth 501 dredging, it is presumed the material was placed there.

   During construction of the geotechnical surcharge pile in late 1995/early 1996 for the PBT potash storage building, the construction contractor used about 200 cy of EOSM steel slag for stabilizing access haul roads to the pile. This caused concern to the Port based on the presence of heavy metals in the steel slag; specifically chromium at concentrations of 4,000 mg/kg. The Port requested removal of the material,

	however, the contractor could only remove approximately 100 cy of the slag. After further evaluation, the residual volume of slag (100 cy) was determined not to pose a threat as it was not leachable, and homogenization with the 200,000 cy of surcharge material would reduce concentrations to levels not posing a risk. The residual slag/surcharge soils were then used as fill material in the Blue Lagoon. In June 1995, the Port submitted an application to the Corps and the State of Oregon for a permit to fill 12.49 acres of jurisdictional wetlands on Terminal 5. The application was approved in 1997 and the wetlands were subsequently filled under Permit No. 9836. The permit was renewed on October 5, 1998 and expired in October 1999. 3. **Stained Soils** – In 1988, the Port performed an Environmental Assessment (EA) for the portion of Terminal 5 occupied by STC Submarine Systems. At the time of the EA, the leasehold was being used to store miscellaneous equipment and 55-gallon drums and 5-gallon pails of what appeared to be lubricants, grease or used oil and limited surficial soil staining was observed in these areas. Soil samples collected revealed detections of PAHs. Based on the results, approximately 30 cubic yards of soil was removed in July 8, 1988 and taken to the Killingsworth Landfill fro disposal. See response to Question 62 below and Alcatel's 104(e) response for additional information.	
a. in general terms, the nature and quantity of the waste or material so transported, used, purchased, generated, stored, treated, disposed, or otherwise handled;	See above response for Question 21.	
b. the chemical composition, characteristics, physical state (e.g.. solid. liquid) of each waste or material so transported, used, purchased, generated, stored. treated, disposed, or otherwise handled;	See above response for Question 21.	
c. how each such waste or material was used, purchased, generated, stored, treated, transported, disposed or otherwise handled by you; and	See above response for Question 21.	
d. the quantity of each such waste or material used, purchased, generated, stored, treated, transported, disposed or otherwise handled by you.	See above response for Question 21.	

22. Describe all activities at each Property that was conducted over, on, or adjacent to, the Willamette River. Include in your description whether the activity involved hazardous substances, waste, or materials and whether any such hazardous substances, waste, or materials were discharged, spilled, disposed of, dropped, or otherwise came to be located in the Willamette River.	There are three over-water berths on the Willamette River adjacent to Terminal 5 including Berths 501, 502 and 503. Berth 501 was constructed by Cook, Berth 502 was constructed by Alcatel and the Port, and Berth 503 was constructed by Riedel for Pacific Coal (who never operated due to financial issues). The Port has periodically conducted maintenance dredging in the Willamette River at these berths, including the following events: • 1980 – 1,200 cy dredged from Berth 501 • 1982 – 30,000 cy dredged from Beth 503 • 1987 – 2,000 cy dredged from Berth 501 • 1988- 1,600 cy dredged from Berth 501 • 1989 – 25,400 cy dredged from Berth 502 • 1992 – 1,250 cy dredged from Berth 501 • 1995 – 4,900 cy dredged from Berth 503 • 1996 – 1,250 cy dredged from Berth 501 • 2000 – 1,725 cy dredged from Berth 503 • 2001 – 5,140 cy dredged from Berth 501 Sediment characterizations have been completed in connection with each event and the dredged material was placed in-water or upland in accordance with federal and state dredging permits. Other than implementing the federally-and state-permitted dredging, no hazardous substances, waste or materials were discharged, spilled, disposed of, dropped or otherwise came to be located in the River from the Port's activities. The Port conducted property development in the 1970s, 1980s and 1990s on property set back from the river. Refer to individual tenant 104(e) responses for information related to their activities over, on or adjacent to the River.	See site investigation documents at Tab 10, specifically: • Port of Portland, 2000. Preliminary Assessment, September 5, 2000. See dredging records at Tab 15.
23. For each Property at which there was or is a mooring facility, dock, wharf or any over-water structure, provide a summary of over-water activities conducted at the structure, including but not limited to, any material loading and unloading operations associated with vessels, materials handling and storage practices, ship berthing and anchoring, ship fueling, and ship building, retrofitting, maintenance, and repair.	Three docks are located on the Willamette River at Terminal 5; Berths 501, 502 and 503. They are leased by the Port to three tenants who currently occupy the property. Activities conducted at the docks include loading of grain at Berth 510, loading of cable at Berth 502, and loading of potash at Berth 503. Refer to individual tenant 104(e) responses for information related to their activities over, on or adjacent to the River.	
24. Describe all activities conducted on leased aquatic lands at each Property. Include in your description whether the activity involved hazardous substances, waste, or materials and whether any such hazardous substances, waste, or materials were discharged, spilled, disposed of, dropped, or otherwise came to be located on such leased aquatic lands.	Not applicable.	
25. Please describe the years of use, purpose, quantity, and duration of any application of pesticides or herbicides on each Property during the period of investigation (1937 to the present). Provide the brand name of all pesticides or herbicides used.	The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide additional details for this question on pesticides/herbicides as it relates to their leaseholds. From 1988 through 1995 the Port added an herbicide (Cuprine) to the Blue Lagoon area on an as needed basis. The	See MSDSs at Tab 16. See environmental site assessment and transaction-related reports at Tab 8, specifically:

	purpose of the herbicide was to deter the growth of vegetation by maintaining the previously existing alkaline pH. Cuprine's active ingredient is copper sulfate pentahydrate (this ingredient is not listed as a hazardous substance). Currently, the Port uses small amounts (i.e. spot spraying) of the following in non-leased vegetated areas: • Garlon 3A – Used in the control of shrubs, brush, hardwoods and broadleaf weeds; active ingredient is triclopyr. • Roundup (aka Glyfos) - used for emerged aquatic vegetation control, broad-spectrum grass, broadleaf weed and brush control; active ingredient is isopropylamine salt of glyphosate • Rodeo (aka Ranger and Aquamaster)– used for emerged aquatic vegetation control, broad-spectrum grass, broadleaf weed and brush control; active ingredient is isopropylamine salt of glyphosate • LI700 – surfactant mixed with the above herbicides to ensure adherance; active ingredients are Phosphatidylcholine, methylacetic acid and alkyl polyoxyethylene ether According to the Port's records, in 2006, Dennis' 7 Dees Landscaping was subcontracted to maintain the grounds of the PBT facility and to minimize seed production. According to Kinder Morgan personnel, no herbicides are mixed at the facility. Two MSDS sheets supplied by Dennis' 7 Dees for herbicides applied to the PBT leasehold: • Crossbow Specialty Herbicide is a low-volatility weed and brush herbicide; the active ingredients are 2,4-dichlorophenoxyacetic acid, butoxthyl ester (34.4 percent), and triclopyr (3,5,6-trichloro-2-pyridinyloxyacetic acid, butoxethyl ester) (16.5 percent). • Surflan A.S. is a grass and broadleaf control herbicide frequently used in orchards; the active ingredient is oryzalin (3.5-dinitro-N4,N4-dipropyl-sulfanilamide (40.4 percent)	• Emcon, 1995. Phase 1, Environmental Site Assessment, Port of Portland, Terminal 5 Facility, Portland, Oregon, prepared for Hall-Buck Marine, Inc., May 22, 1995. • Hart Crowser, 2006. Environmental Site Assessment (ESA)-Phase 1 and Mid-Lease Audit, March 28, 2006.
26. Describe how wastes transported off the Property for disposal are and ever were handled, stored, and/or treated prior to transport to the disposal facility.	In 1995, the Port removed 503.53 tons of apparent sandblast grit material that was placed near the Blue Lagoon. The grit may have originated from sandblasting activities conducted at Terminal 6. The sandblast grit was sampled and analyzed for Toxicity Characteristic Leaching Procedure (TCLP) metals to determine if the material would classify as a hazardous waste. None of the samples were found to contain TCLP metals above regulatory thresholds. The apparent sandblast grit materials were excavated and transported to the Hillsboro Landfill for disposal under Oregon Special Waste permit number 2396. The remainder of the apparent sandblast grit material was left at the site because these materials were within the boundaries of a jurisdictional wetland. In 1996, after receiving the wetland fill permit, the Port removed an additional 20.52 tons of sandblast grit and 145.43 tons of debris consisting of asphalt, railroad ties, wood and vegetation. The materials were transported to Hillsboro Landfill for disposal under Oregon Special Waste permit number 2396. The tenants are responsible for the collection and disposal of solid waste generated at their leaseholds. See tenant responses for specific information related to this question.	See environmental site assessment and transaction-related reports at Tab 8. See Blue Lagoon records at Tab 9. See site investigation documents at Tab 10. See wetland documentation at Tab 14.

27. Has Respondent ever arranged for disposal or treatment or arranged for transportation for disposal or treatment of materials to any Property (including the Willamette River) within the Investigation Area? If so, please identify every Property that Respondent's materials were disposed or treated at in the Investigation Area. In addition, identify:	Yes. See the response to Question 21. The Port has placed dredged material, construction debris, and sandblast grit on the Terminal 5 property. Additionally, EOSM disposed of steel slag and other materials in the Blue Lagoon prior to its filling and the Corps placed material dredged from the navigational channel on the Terminal 5 property.	See environmental site assessment and transaction-related reports at Tab 8, specifically: • Emcon, 1995. Phase 1, Environmental Site Assessment, Port of Portland, Terminal 5 Facility, Portland, Oregon, prepared for Hall-Buck Marine, Inc., May 22, 1995. • Hart Crowser, 2006. Environmental Site Assessment (ESA)-Phase 1 and Mid-Lease Audit, March 28, 2006. See Blue Lagoon records at Tab 9, specifically: • GeoEngineers. 1996. Excavation Activities Letter Report, Terminal 5, Blue Lagoon, Port of Portland, Portland, Oregon, GEI File Number 1258-025-36-2150. July 15, 1996. • GeoEngineers, 1996. Letter report entitled Excavation Activities, Terminal Five, "Blue Lagoon," Port of Portland, Portland, Oregon, July 15, 1996. See site investigation documents at Tab 10, specifically: • Port of Portland, 2000. Preliminary Assessment, September 5, 2000.
a. the persons with whom the Respondent made such arrangements;	See detailed information on the dates of disposal in the response to Question 27 (c) below.	
b. every date on which Respondent made such arrangements;	See detailed information on the dates of disposal in the response to Question 27 (c) below.	
c. the nature, including the chemical content, characteristics, physical state (e.g., solid, liquid) and quantity (volume and weight) of all materials involved in each such arrangement;	• In 1985, disposal of solid waste was observed around the Blue Lagoon. About ten to twelve, half buried 55-gallon drums were observed along the banks. It was determined that the drums had been used to transport railroad spikes and tie plates during the Pacific Coal Terminal construction and had not contained liquid or dry bulk products. Following their discovery, the drums were removed by the Port. It is not known where the drums were disposed. In 1993, it was reported that EOSM piled weathered slag, sometimes mixed with scrap metal, around the perimeter of the pond. In 1995, the west end of the lagoon was observed to contain substantial amounts of debris; the eastern and southern portions of the pond were filled with slag that apparently contained large pieces of metallic debris. Sandblast grit was also present along the eastern portion of the pond.	See environmental site assessment and transaction-related reports at Tab 8, specifically: • Century West Engineering, 1993. Environmental Site Assessment (ESA) T5-Level 1. March 15, 1993. • Emcon, 1995. Phase 1, Environmental Site Assessment, Port of Portland, Terminal 5 Facility, Portland, Oregon, prepared for Hall-Buck Marine, Inc., May 22, 1995.

- The Port historically disposed of solid waste adjacent and east of the Blue Lagoon, consisting of inert materials such as asphalt, concrete, soil and rock. According to Sebastian Degens, this activity only occurred from the late 1980s until the Port issued a letter in 1990 calling for its discontinuation. The material was removed in 1996 and taken to the Hillsboro Landfill under Oregon Special Waste Permit 2396.

- Several piles of sandblast grit were transported to the Terminal 5 property from Terminal 6. The period of disposal is unknown, but the Port issued a letter in 1990 calling for the discontinuation of disposal. The sandblast grit was sampled and analyzed for Toxicity Characteristic Leaching Procedure (TCLP) metals to determine if the material would classify as a hazardous waste. None of the samples were found to contain TCLP metals above regulatory thresholds and the material was determined to be non-hazardous. In August 1995, Hahn & Associates removed approximately 503 tons of sandblast grit for disposal at the Hillsboro Landfill in Hillsboro, Oregon. After receipt of the wetland fill permit, GeoEngineers removed approximately 21 tons of the remaining grit. Some amount of the sandblast grit was left adjacent to the Blue Lagoon because it was inside the wetland boundaries and was subsequently covered and filled with clean sand from the surcharge material described in the response to Questions 16 and 17 above.

- Steel slag was placed in the Blue Lagoon by EOSM from 1975 to 1994, primarily in the southern and eastern portion of the pond. Approximately 200 cubic yards of the slag material was also used by a contractor to stabilize access haul to the geotechnical surcharge pile at the PBT facility in 1995. This caused concern to the Port based on the presence of heavy metals in the steel slag; specifically chromium at concentrations of 4,000 mg/kg. The Port requested removal of the material, however, the contractor could only remove approximately 100 cy of the slag. After further evaluation, the residual volume of slag (100 cy) was determined not to pose a threat as it was not leachable, and homogenization with the 200,000 cy of surcharge material would reduce concentrations to levels not posing a risk. The residual slag/surcharge soils were then used as fill material in the Blue Lagoon.

- In May of 1996, the Port began filling the Blue Lagoon with sand from a pile of fill material placed on the property as surcharge (same material characterized in 1995 – see discussion in response to Questions 16 and 17 above). Water displaced by filling was pumped through a pH adjustment system to a settling pond before being discharged to the Willamette River under NPDES Waste Discharge Permit No. 70613. Discharge monitoring performed by the Port in accordance with the Permit found that turbidity levels were above discharge limits. The Port made several corrections to reduce turbidity levels and ultimately requested and obtained DEQ's approval to pump water from the Blue Lagoon onto the sand pile to pre-wet it prior to placement in the Lagoon.

- Emcon, 1995. Phase 2, Environmental Site Assessment, Port of Portland Terminal 5 Facility, Portland, Oregon, prepared for Hall-Buck Marine, Inc., July 12, 1995.

- Hart Crowser, 1991. Environmental Assessment Report, Marine Terminal 5, Portland, Oregon, prepared for the Port of Portland, Portland, Oregon, August 12, 1991.

See Blue Lagoon records at Tab 9, specifically:

- PTI Environmental Services, 1995. Site Characterization for the "Blue Lagoon" at Marine Terminal 5, prepared for the Port of Portland, Portland, Oregon, April 1995.

- Century West Engineering Corporation, 1994. Preliminary Site Investigation, Blue Lagoon, Terminal 5, prepared for the Port of Portland, Portland, Oregon, February 4, 1994.

- GeoEngineers. 1996. Excavation Activities Letter Report, Terminal 5, Blue Lagoon, Port of Portland, Portland, Oregon, GEI File Number 1258-025-36-2150. July 15, 1996.

See site investigation documents at Tab 10, specifically:

- Hahn & Associates. 1995. Solid and Hazardous Waste Determination and Disposal Assistance, Sandblasting Grit Material, Port of Portland Marine Terminal 5, North Lombard, Portland, Oregon. October 11, 1995.

- Port of Portland, 2000. Preliminary Assessment, September 5, 2000.

- Port of Portland, 2007. Draft Responses to EPA Comments on DEQ Source Control Decision (EPA Letter to DEQ 6/29/07).

		See surcharge material information at Tab 11. See permits at Tab 17.
d. in general terms, the nature and quantity of the non-hazardous materials involved in each such arrangement;	See response to Question 27 (c) above.	
e. in general terms, the nature and quantity of any hazardous materials involved in each such arrangement;	See response to Question 27 (c) above.	
f. the owner of the materials involved in each such arrangement, if not Respondent;	EOSM was the owner of the steel slag and other steel manufacturing materials placed in the Blue Lagoon during their period of use from 1975 to 1994. The construction debris and sandblast grit was owned by the Port.	
g. all tests, analyses, analytical results or manifests concerning each hazardous material involved in such transactions;	• In 1990, Hahn & Associates collected six samples from and around the Blue Lagoon (one water, two sediment, and three of materials disposed of at the site). The samples were analyzed for a variety of parameters including metals, pesticides, solvents, and petroleum hydrocarbons. No solvents or pesticides were detected. Asphalt-like compounds were detected in two of the material samples. • The sandblast grit was sampled and analyzed for Toxicity Characteristic Leaching Procedure (TCLP) metals to determine if the material would classify as a hazardous waste. None of the samples were found to contain TCLP metals above regulatory thresholds and the material was determined to be non-hazardous. • Crowley Environmental collected a sample from the drums (along with two water samples from the lagoon) in 1985 and had it analyzed for metals (methodology unknown). Four metals were detected, including cadmium (0.123 mg/l), chromium (0.115 mg/l), mercury (0.154 mg/l) and zinc (0.405 mg/l). • Several phases of investigation were conducted in the area of the Blue Lagoon to assess for the presence of chemicals in the residual sediments and slag. Studies with analytical data on the sediment or slag include (and the reports are enclosed with this response): o 1993 Facility Investigation – Century West Engineering installed four groundwater monitoring wells (MW-1 through MW-4) and sampled lagoon water, sediment, soil, and groundwater (Century West, 1994). o 1995 Facility Investigation – PTI Environmental Services sampled lagoon water, sediment, groundwater, and background soil (PTI, 1995). The slag collected during the Century West 1993 investigation contained barium (295 mg/kg), chromium (3950 mg/kg), copper (133 mg/kg), and zinc (124 mg/kg) above background concentrations (Century West, 1994). Only barium was detected in the sediment samples at concentrations from 706 mg/kg to 907 mg/kg and was above background levels. The 1995, PTI Environmental Services investigation included sampling slag from the lagoon banks, sediment, adjacent surface soils, and groundwater from the monitoring wells. Chemical analyses of the sediment and slag samples included total and leachable metals, petroleum hydrocarbons, PCBs, volatile organic compounds (VOCs), pesticides, and herbicides. VOCs, herbicides, and pesticides were not detected. Chromium	See environmental site assessment and transaction-related reports at Tab 8, specifically: • Century West Engineering, 1993. Environmental Site Assessment (ESA) T5-Level 1. March 15, 1993. • Emcon, 1995. Phase 1, Environmental Site Assessment, Port of Portland, Terminal 5 Facility, Portland, Oregon, prepared for Hall-Buck Marine, Inc., May 22, 1995. • Emcon, 1995. Phase 2, Environmental Site Assessment, Port of Portland Terminal 5 Facility, Portland, Oregon, prepared for Hall-Buck Marine, Inc., July 12, 1995. • Hart Crowser, 1991. Environmental Assessment Report, Marine Terminal 5, Portland, Oregon, prepared for the Port of Portland, Portland, Oregon, August 12, 1991. See Blue Lagoon records at Tab 9, specifically: • PTI Environmental Services, 1995. Site Characterization for the "Blue Lagoon" at Marine Terminal 5, prepared for the Port of Portland, Portland, Oregon, April 1995. • Century West Engineering Corporation, 1994. Preliminary Site Investigation, Blue Lagoon,

	was detected in slag at concentrations up to 5,960 mg/kg, but was not leachable. PCBs were detected in slag and lagoon sediment at 1.3 to 8.7 mg/kg. The source of the PCB detections in the lagoon sediments is not known, but given the colocated metals associated with the former slag cooling activities in the Blue Lagoon and the known PCB impacts on the EOSM property, is assumed to be connected with EOSM's operations.	Terminal 5, prepared for the Port of Portland, Portland, Oregon, February 4, 1994. • GeoEngineers. 1996. Excavation Activities Letter Report, Terminal 5, Blue Lagoon, Port of Portland, Portland, Oregon, GEI File Number 1258-025-36-2150. July 15, 1996. See site investigation documents at Tab 10, specifically: • Hahn & Associates. 1995. Solid and Hazardous Waste Determination and Disposal Assistance, Sandblasting Grit Material, Port of Portland Marine Terminal 5, North Lombard, Portland, Oregon. October 11, 1995. • Port of Portland, 2000. Preliminary Assessment, September 5, 2000. • Port of Portland, 2007. Draft Responses to EPA Comments on DEQ Source Control Decision (EPA Letter to DEQ 6/29/07). See surcharge material information at Tab 11.
h. the address(es) for each Property, precise locations at which each material involved in such transactions actually was disposed or treated;	The materials described in response to Question 27 (c) above were either placed at the Terminal 5 property or where noted, taken to the Hillsboro Landfill in Hillsboro Oregon. The address is as follows: Hillsboro Landfill 3205 SE Minter Bridge Rd Hillsboro, OR 97123 Various locations at the property were used for placement of materials, as described above in response to Question 21.	
i. the owner or operator of each facility at which hazardous or non-hazardous materials were arranged to be disposed at within the investigation Area:	The Port is the current owner of the land where the Blue Lagoon was formerly located. EOSM was the owner of the property where the Blue Lagoon was formerly located from 1975 to 1981. PBT is the current tenant of this portion of Terminal 5.	
j. who selected the location to which the materials were to be disposed or treated;	The disposal of steel slag and other materials (ceramic tubes, furnace brick) by EOSM in the Blue Lagoon was determined by EOSM. The steel slag disposal in the lagoon was also approved by DEQ at the time of placement, as this was the preferred method of disposal at that time. The disposal of residual sandblast grit in the Blue Lagoon was determined by the Port. The disposal of sandblast grit and construction debris at the Hillsboro Landfill was determined by the Port. It is not known who determined the 100 cubic yards used on the access haul road be	

	homogenized with the 200,000 cubic yard surcharge pile. The placement of dredged material from the Willamette River navigational channel was determined by the Corps.	
k. who selected the Property as the location at which hazardous materials were to be disposed or treated; and	See response to Question 27 (j) above.	
l. any records of such arrangement and each shipment.	Copies of the receipts for the GeoEngineers disposal at Hillsboro Landfill are contained at Tab 9. The Port was not able to locate receipts for the Hahn disposal at Hillsboro Landfill.	See Blue Lagoon records at Tab 9, specifically: • GeoEngineers. 1996. Excavation Activities Letter Report, Terminal 5, Blue Lagoon, Port of Portland, Portland, Oregon, GEI File Number 1258-025-36-2150. July 15, 1996.
28. Describe the plants and other buildings or structures where Respondent carried out its operations at each Property within the Investigation Area (excluding locations where ONLY clerical/office work was performed).	Not applicable. The Port does not currently occupy any structures at the Terminal. The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide details for this question as it relates to operations at their leaseholds.	
29. Provide a schematic diagram or flow chart that fully describes and/or illustrates the Respondent's operations on each Property.	Not applicable. The Port does not conduct any operations or activities at the Terminal that would be depicted in a schematic diagram. The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide details for this question as it relates to operations at their leaseholds.	
30. Provide a brief description of the nature of Respondent's operations at each location on each Property including:	The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide details for this question as it relates to operations at their leaseholds. The Port has been the owner of Terminal 5 since 1965. As the land owner, the Port manages tenant leases and provides limited landscaping. The Port also has maintenance responsibility for the dock and access ramp to Berth 503 (fender system, maintenance dredging, concrete repair) and some maintenance dredging responsibilities at Berth 501 and 502. Past Port activities have included placement of dredged material on the site in the 1960s and 1970s to raise the elevation of the site; some facility development in the 1970s, 1980s and 1990s; and additional placement of fill in the former Blue Lagoon located on the southern portion of the property.	
a. the date such operations commenced and concluded; and	See response to Question 30 above.	
b. the types of work performed at each location, including but not limited to the industrial, chemical, or institutional processes undertaken at each location.	Not applicable.	
31. If the nature or size of Respondent's operations changed over time, describe those changes and the dates they occurred.	See response to Question 30 above. The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide details for this question as it relates to operations at their leaseholds.	

32. List the types of raw materials used in Respondent's operations, the products manufactured, recycled, recovered, treated, or otherwise processed in these operations.	The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide details for this question as it relates to operations at their leaseholds. The Port does not manufacture, recycle, recover, treat or otherwise process products at the Terminal 5 property and therefore does not use raw materials.	
33. Provide copies of Material Safety Data Sheets (MSDS) for materials used in the Respondent's operations.	The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide details for this question as it relates to operations at their leaseholds. MSDS for the herbicides listed in response to Question 25 are contained at Tab 16.	See MSDSs at Tab 16.
34. Describe the cleaning and maintenance of the equipment and machinery involved in these operations, including but not limited to:	Not applicable. The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide details for this question as it relates to operations at their leaseholds.	
a. the types of materials used to clean/maintain this equipment-machinery;	Not applicable.	
b. the monthly or annual quantity of each such material used.	Not applicable.	
c. the types of materials spilled in Respondent's operations;	Not applicable.	
d. the materials used to clean up those spills;	Not applicable.	
e. the methods used to clean up those spills; and	Not applicable.	
f. where the materials used to clean up those spills were disposed of.	Not applicable.	
35. Describe the methods used to clean up spills of liquid or solid materials during Respondent's operation.	Not applicable. The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide details for this question as it relates to operations at their leaseholds.	
36. For each type of waste (including by-products) from Respondent's operations, including but not limited to all liquids, sludges, and solids, provide the following information:	Not applicable. The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide details for this question as it relates to operations at their leaseholds.	
a. its physical state;	Not applicable.	
b. its nature and chemical composition;	Not applicable.	
c. its color;	Not applicable.	
d. its odor.	Not applicable.	

e. the approximate monthly and annual volumes of each type of waste (using such measurements as gallons, cubic yards, pounds, etc.); and	Not applicable.	
f. the dates (beginning & ending) during which each type of waste was produced by Respondent's operations.	Not applicable.	
37. Provide a schematic diagram that indicates which pan of Respondent's operations generated each type of waste, including but not limited to wastes generated by cleaning and maintenance of equipment and machinery and wastes resulting from spills of liquid materials.	Not applicable. The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide details for this question as it relates to operations at their leaseholds.	
38. Identify all individuals who currently have and those who have had responsibility for Respondent's environmental matters (e.g. responsibility for the disposal, treatment, storage, recycling, or sale of Respondent's wastes). Also provide each individual's job title, duties, dates performing those duties, supervisors for those duties, current position or the date of the individual's resignation, and the nature of the information possessed by such individuals concerning Respondent's waste management.	The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide details for this question as it relates to operations at their leaseholds. Current employees who have responsibility for the Port's environmental matters include: • David Breen, Environmental Project Manager II • Sebastian Degens – Marine Planning & Development Manager • Jennifer Fonseca-Littrell – Environmental Specialist I • Marla Harrison – Operations Environmental Safety Manager I • Nicole LaFranchise, Environmental Project Manager III • Sam Ruda, Director of Marine & Industrial Development Former employees who have had responsibility for the Port's environmental matters include: • John Childs, Environmental Project Manager II (1997-2003) • Katherine Futornick, Corporate Environmental Manager (1994-1999) • Danil Hancock, Waterway Resources Manager (1988-1994) • Russell Korvola, Environmental Services Manager (1988-1995) • Cheryl Koshuta, Chief Environmental Officer (1999-2007) • Roland Montagne, Environmental External Affairs Manager (1986-1999) • Don Pettit, Environmental Project Manager II (2005-2007) • William (Quentin) Pitts, Environmental Project Manager II (2006-2008) • Padraic Quinn, Environmental Project Manager II (1993-2002) • Denise Ragland, Marine Superintendent II (1967-2003) • Anne Summers, Environmental Project Manager III (2001-2008)	
39. For each type of waste describe Respondent's *contracts, agreements or other arrangements for its* disposal, treatment, or recycling.	The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide details for this question as it relates to operations at their leaseholds. The Port does not operate at Terminal 5. Discrete incidents where the Port has disposed of wastes are described in	

	response to Questions 16, 17 and 27 above.	
40. Provide copies of such contracts and other documents reflecting such agreements or arrangements:	Not applicable. The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide details for this question as it relates to operations at their leaseholds.	
a. state where Respondent sent each type of its waste for disposal, treatment, or recycling;	Not applicable.	
b. identify all entities and individuals who picked up waste from Respondent or who otherwise transported the waste away from Respondent's operations (these companies and individuals shall be called "Waste Carriers" for purposes of this Information Request);	Not applicable.	
c. if Respondent transported any of its wastes away from its operations, please so indicate;	Not applicable.	
d. for each type of waste specify which Waste Carrier picked it up;	Not applicable.	
e. indicate the ultimate disposal/recycling/treatment location for each type of waste.	Not applicable.	
f. provide all documents indicating the ultimate disposal/recycling/treatment location for each type of waste; and	Not applicable.	
g. state the basis for and provide any documents supporting the answer to the previous question.	Not applicable.	
41. Describe all wastes disposed by Respondent into Respondent's drains including but not limited to:	The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide details for this question as it relates to operations at their leaseholds; however, the lease agreements prohibit such activity as it is regulated under the Port's MS4 permit. The Port does not dispose of wastes into drains at Terminal 5.	See MS4 permit information at Tab 13.
a. the nature and Chemical composition of each type of waste;	Not applicable.	
b. the dates on which those wastes were disposed;	Not applicable.	
c. the approximate quantity of those wastes disposed by month and year;	Not applicable.	
d. the location to which these wastes drained (e.g. septic system or storage tank at the Property, pre-treatment plant, Publicly Owned Treatment Works (POTW), etc.); and	Not applicable.	
e. whether and what pretreatment was provided.	Not applicable.	
42. Identify any sewage authority or treatment works to which Respondent's waste was sent.	The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide details for this question as it relates to operations at their leaseholds.	

	The Port is not aware of any waste materials sent to the sewage authority or treatment works (i.e. City of Portland POTW).	
43. Describe all settling tank. septic system, or pretreatment system sludges or other treatment wastes resulting from Respondent's operations.	The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide details for this question as it relates to operations at their leaseholds. The Port is not aware of any settling tanks, septic systems or pretreatment systems or any sludges or wastes from those types of systems.	
44. If applicable, describe the facilities, processes and methods Respondent or Respondent's contractor used, and activities engaged in, either currently or in the past, related to ship building, retrofitting, maintenance or repair, including, but not limited to, dry-docking operations, tank cleaning, painting and re-powering.	The Terminal 5 property has never been used for ship building, retrofitting, maintenance or repair, and has not had any dry dock operations, tank cleaning, painting or re-powering associated with vessels.	
45. Describe any hazardous substances, wastes, or materials used or generated by the activities described in response to the previous Question and how these hazardous substances, materials and wastes were released or disposed of.	Not applicable.	
46. Provide copies of any records you have in your possession, custody or control relative to the activities described in response to the previous two Questions.	Not applicable.	
47. Describe any process or activity conducted on a Property identified in response to Question 4 involving the acquisition, manufacture, use, storage, handling, disposal or release or threatened release of polychlorinated biphenyl(s) ("PCB(s)" or PCB(s)-containing materials or liquids.	In 1995, PTI Environmental Services conducted site characterization activities at the Blue Lagoon. Their study included sampling slag from the lagoon banks, sediment, adjacent surface soils, and groundwater from the monitoring wells. The suite of chemical analyses included PCBs, which revealed detections in the sediment at 1.4 to 8.7 mg/kg. The source of the PCB detections in the lagoon sediments is not known, but given the colocated metals associated with the former slag cooling activities in the Blue Lagoon and the known PCB impacts on the EOSM property, is assumed to be connected with EOSM's operations. Based on the detected concentrations compared with applicable regulatory criteria and their relative immobility in the environment, it was determined the materials could remain in place as long as they are managed under a CMMP. A CMMP has been prepared and approved by the DEQ. The CMMP provides procedures for managing soil in the Blue Lagoon area to mitigate exposure. In the event of disturbance of soil within that area, the CMMP requires soil to be characterized to determine appropriate handling and disposal requirements. Final disposition of the soil shall be as follows: • No restriction if contaminant concentrations are less than background for metals and below method reporting limits for organics; • Re-use on Terminal 5 (but not in a manner that could erode into storm water facilities) if contaminant concentrations are above background but less than industrial screening levels; or • Dispose of in a licensed landfill if at least one contaminant concentration exceeds industrial screening levels.	See environmental site assessment and transaction-related reports at Tab 8. See Blue Lagoon records at Tab 9. See site investigation documents at Tab 10.

48. For each process or activity identified in response to the previous Question, describe the dates and duration of the activity or process and the quantity and type of PCB(s) or PCB(s) containing materials or liquids.	See the response to Question 47 above.	
49. For each process or activity identified in response to the previous two Questions, identify the location of the process or activity on the Property.	See the response to Question 47 above.	
Section 5.0 - Regulatory Information		
50. Identify all federal, state and local authorities that regulated the owner or operator of each Property and/or that interacted with the owner or operator of each Property. Your response is to address all interactions and in particular all contacts from agencies/departments that dealt with health and safety issues and environmental concerns.	The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide details for this question as it relates to operations at their leaseholds. Environmental Contacts include: • Federal – Army Corps of Engineers; National Marine Fisheries Service (NMFS); EPA; Coast Guard • State – Oregon DEQ; Department of State Lands (DSL); Oregon Water Resources Division • Local – City of Portland Bureau of Environmental Services; City of Portland Fire Bureau Health & Safety Contacts include: • Federal – U.S. Department of Labor, Office of Worker's Compensation Programs; Coast Guard • State – State of Oregon, Department of Consumer and Business Services; State of Oregon Worker's Compensation Division; Oregon OSHA • Local – City of Portland Police Bureau; City of Portland Fire Bureau; Multnomah County Sherriff's Department Historical contacts for the above federal, state and local agencies are contained in the applicable correspondence contained in the following tabs: • Environmental site assessment and transaction-related reports at Tab 8. • Blue Lagoon records at Tab 9. • Investigation and cleanup records at Tab 10. • Surcharge material references at Tab 11. • Well documentation at Tab 12. • Stormwater information at Tab 13. • Wetland information at Tab 14. • Dredging records at Tab 15. • Permit information at Tab 17. • Spill records at Tab 18.	

	Current contacts for the above federal, state and local agencies (where assigned) include: 1. Tom Gainer, Oregon DEQ 2. Kristine Koch, EPA Region 10 3. Cy Young, Oregon Department of State Lands	
51. Describe all occurrences associated with violations, citations, deficiencies. and/or accidents concerning each Property during the period being investigated related to health and safety issues and/or environmental concerns. Provide copies of all documents associated with each occurrence described.	The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide details for this question as it relates to operations at their leaseholds. The following violations have been identified in relation to the bulk handling facility: Hall-Buck Marine, Inc., 1998. Letter regarding HBM Portland Bulk Terminal 5, Exceedance Notice, Permit No. 101377; Outfall 001 from Ms. Krien-Schmidt. June 10, 1998. Hall-Buck Marine, Inc., 1998. Letter regarding HBM Portland Bulk Terminal 5, Exceedance Notice, Permit No. 101377; Outfall 001 from Ms. Krien-Schmidt to Mr. Sheetz dated June 10, 1998. Kinder Morgan Bulk Terminals, Inc., 1998. Letter regarding Letter of Violation & Notice of Intent to Assess Civil Penalty LOV-1998-026; Discharge Permit No. 400-132, Kinder Morgan Bulk Terminals, Inc. (KMBT) – (formerly Hall-Buck Marine, Inc.), Portland Bulk Terminal 5, from Ms. Krien-Schmidt to Mr. Dean dated September 9, 1998. Kinder Morgan, 1999. Letter regarding Letter of Violation & Notice of Intent to Assess Civil Penalty LOV-1998-026; Discharge Permit No. 400-132, Portland Bulk Terminal 5, from Ms. Krien-Schmidt to Mr. Dean. September 9, 1998.	*Documentation from these violations were not included in the Port's records. See PBT 104(e) response for additional information.*
52. Provide a list of all local, state and federal environmental permits ever issued to the owner or operator on each Property (e.g., RCRA permits. NPDES permits, etc.). Please provide a copy of each federal and state permit, and the applications for each permit, ever issued to the owner or operator on each Property.	The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide details for this question as it relates to operations at their leaseholds. The following environmental permits have been issued to the Port: • Oregon DEQ – Air Contaminant Discharge Permit No. 26-3071 was issued to the Port in 1991 in anticipation of operations at the bulk facility. There is no indication that the Port operated under the permit. The permit was subsequently transferred to Hall-Buck in 1995. • Oregon DEQ - NPDES Municipal Separate Storm Sewer System (MS4) Discharge Permit No. 101314 was issued to the Port on September 7, 1995. This permit is still in effect. • Oregon DEQ – NPDES Permit No. 101377 was issued to the Port in 1982 in connection with the development of the coal facility that was never completed. The Port maintained the permit, although there were no discharges during its effect. In 1996, the Port requested modification of the permit to cover treated lagoon effluent (i.e. neutralizing pH). The permit renewal application also requested minimal and sporadic discharges of water, product, and small amounts of dust during regular wash-down activities. The DEQ	See stormwater information at Tab 13. See wetland information at Tab 14. See dredging records at Tab 15. See permits at Tab 17.

	approved this permit modification on August 5, 1997. The permit expired in 2001. • Oregon DEQ – NPDES permit 3415-J was issued to the Port on October 20, 1981. The permit was for treated runoff from the bulk facility. It is believed this is the predecessor to Permit No. 101377 described above. The permit was not used as the coal facility was never completed. The permit expired on July 31, 1986. Copies of the above-referenced permits are included in Tabs 13 and 17. Additional permit information for dredging and filling (both dredged material placement and wetland fill) are contained at Tabs 14 and 15, respectively.	
53. Did the owner or operator ever file a Hazardous Waste Activity Notification under the RCRA? If so, provide a copy of such notification.	Not to the Port's knowledge.	
54. Did the owner or operator's facility on each Property ever have "interim status" under the RCRA? If so, and the facility dots not currently have interim status; describe the circumstances under which the facility lost interim status.	Not to the Port's knowledge.	
55. Provide all RCRA Identification Numbers issued to Respondent by EPA or a state for Respondent's operations.	The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide details for this question as it relates to operations at their leaseholds. To the Port's knowledge, there are no RCRA Identification Numbers issued to the Terminal 5 property for Port operations.	
56. Identify all federal offices to which Respondent has sent or filed hazardous substance or hazardous waste information. State the years during which such information was sent/filed.	The Port has not filed hazardous substance or hazardous waste information with a federal office for the Terminal 5 property.	
57. Identify all state offices to which Respondent has sent or filed hazardous substance or hazardous waste information. State the years during which such information was sent/filed.	The Port has never filed hazardous substance or hazardous waste information with a state office for the Terminal 5 property.	

58. List all federal and state environmental laws and regulations under which Respondent has reported federa1 or state governments, including but not limited to: Toxic Substances Control Act, 15 U.S.C. Sections 2601 et seq., (TSCA); Emergency Planning and Community Right-to-Know Act, 42 U.S.C. Sections 1101 et seq., (EPCRA); and the Clean Water Act (the Water Pollution Prevention and Control Act), 33 U.S.C. Sections 1251 et seq., Oregon Hazardous Substance Remedial Action Law, ORS 465.315, Oregon Water Quality law, ORS Chapter 468(b), Oregon Hazardous Waste and Hazardous Materials law, ORS Chapters 465 and 466, or Oregon Solid Waste law, ORS Chapter 459. Provide copies of each report made, or if only oral reporting was required, identify the federal and state offices to which such report was made.	The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide details for this question as it relates to operations at their leaseholds. • Federal – Clean Water Act. NPDES (MS4) permit administered by Oregon DEQ. • State – Port's NPDES DEQ Municipal Separate Storm Sewer System (MS4) Discharge Permit No. 101314; Hazardous Substance Remedial Action Rules, Division 122 (OAR 340-122-010 through 0590)	See site investigation documents at Tab 10 See MS4 information at Tab 13.
59. Provide a copy of any registrations, notifications, inspections or reports required by the Toxic Substances Control Act, 15 USC § 2601 et seq., or state law, to be maintained or submitted to any government agency, including fire marshal(s), relating to PCB(s) or PCB(s) containing materials or liquids on any Property identified in response to Question 4.	The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide details for this question as it relates to operations at their leaseholds. The Port is not aware of has not filed any registrations, notifications, inspections or reports under TSCA for the Terminal 5 property.	
60. Has Respondent or Respondent's contractors, lessees, tenants, or agents ever contacted, provided notice to, or made a report to the Oregon Department of State Lands ("DSL") or any other state agency concerning an incident, accident, spill, release, or other event involving Respondent's leased state aquatic lands? If so, describe each incident, accident, spill, release, or other event and provide copies of all communications between Respondent or its agents and DSL or the other state agency and all documents that were exchanged between Respondent, its agents and DSL or other stale agency.	Not to the Port's knowledge.	
61. Describe all notice or reporting requirements to DSL that you had under an aquatic lands lease or slate law or regulation regarding incidents affecting, or activities or operations occurring on leased aquatic lands. Include the nature of the matter required to be reported and the office or official to whom the notice or report went to. Provide copies of all such notices or reports.	Not applicable.	
Section 6.0 - Releases and Remediation		

62. Identify all leaks, spills, or releases into the environment of any waste, including petroleum, hazardous substances, pollutants, or contaminants, that have occurred at or from each Property, which includes any aquatic lands owned or leased by Respondent. In addition, identify:	The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide details for this question as it relates to operations at their leaseholds. 1. Transformer spill - A transformer spill occurred on the Terminal 5 property as a result of vandalism/theft. It was reported that the transformer oil did not contain any PCBs. A smaller, older spill was discovered at the time of the response. 2. Gasoline spill - A gasoline spill occurred on EOSM property located to the south along the T5 southern property boundary. See EOSM 104(e) response for details. 3. Blue Lagoon – See responses to Questions 8, 13, 17, 21, 26, 27 and 47. 4. Stained soils – According to a 1988 Environmental Assessment, STC Submarine Systems was storing miscellaneous equipment and 55-gallon drums and 5-gallon pails of what appeared to be lubricants, grease or used oil at its leasehold. The EA indicates surficial soil staining was observed near a number of the drums and pails. Additional information is provided below. The Port also understands Alcatel is a recipient of a 104(e) request and should provide details regarding this release in its response.	See environmental site assessment and transaction-related reports at Tab 8, specifically: • Dames & Moore, 1988. Draft Final Report, Port of Portland, Property Transfer Environmental Assessment, Terminal 5 Cable Site, Portland, Oregon, prepared for the Port of Portland, Portland, Oregon, June 29, 1988. See Blue Lagoon records at Tab 9. See site investigation documents at Tab 10, specifically: • Port of Portland, 2000. Preliminary Assessment, September 5, 2000. • Port of Portland, 2007. Draft Responses to EPA Comments on DEQ Source Control Decision (EPA Letter to DEQ 6/29/07). See spill records at Tab 18, specifically: • Multnomah County, 1995. Victims Assistance Program Restitution Claim DA# 1063996/Mischief I. • Century West Engineering Corporation, 1995. Terminal 5 Transformer Spill Cleanup, Terminal 5 – N. Lombard Street, Portland, Oregon, August 30, 1995. • Port of Portland, 1995. Letter to Mr. Dick Wittkop, Re: T5 Theft/Cleanup, August 3, 1995.
a. when such releases occurred;	1. Transformer spill - May 30, 1995 2. Gasoline spill - September 1997 3. Blue Lagoon – See responses to Questions 8, 13, 17, 21, 26, 27 and 47. 4. Stained soils - 1988	See environmental site assessment and transaction-related reports at Tab 8, specifically: • Dames & Moore, 1988. Draft Final Report, Port of Portland, Property Transfer Environmental Assessment, Terminal 5 Cable Site, Portland, Oregon, prepared for the Port of Portland, Portland, Oregon, June 29, 1988.

		See Blue Lagoon records at Tab 9. See site investigation documents at Tab 10, specifically: • Port of Portland, 2000. Preliminary Assessment, September 5, 2000. • Port of Portland, 2007. Draft Responses to EPA Comments on DEQ Source Control Decision (EPA Letter to DEQ 6/29/07). See spill records at Tab 18, specifically: • Multnomah County, 1995. Victims Assistance Program Restitution Claim DA# 1063996/Mischief I. • Century West Engineering Corporation, 1995. Terminal 5 Transformer Spill Cleanup, Terminal 5 – N. Lombard Street, Portland, Oregon, August 30, 1995. • Port of Portland, 1995. Letter to Mr. Dick Wittkop, Re: T5 Theft/Cleanup, August 3, 1995.
b. how the releases occurred (e.g. when the substances were being delivered by a vendor, transported or transferred (to or from any tanks. drums, barrels, or recovery units). and treated);	1. Transformer spill - The transformer leak occurred when the individual who had broken into the facility was interrupted while pulling apart the transformer and components. 2. Gasoline spill - The gasoline spill occurred from an aboveground storage tank (AST) situated along the north fence of the EOSM property and southwest of the T5 Port Expansion Area (currently the south portion of the PBT leasehold). 3. Blue Lagoon – See responses to Questions 8, 13, 17, 21, 26, 27 and 47. 4. Stained soils – limited surficial soil staining occurred likely as a result of leakage from the drums and pails.	See environmental site assessment and transaction-related reports at Tab 8, specifically: • Dames & Moore, 1988. Draft Final Report, Port of Portland, Property Transfer Environmental Assessment, Terminal 5 Cable Site, Portland, Oregon, prepared for the Port of Portland, Portland, Oregon, June 29, 1988. See Blue Lagoon records at Tab 9. See site investigation documents at Tab 10, specifically: • Port of Portland, 2000. Preliminary Assessment, September 5, 2000.

		• Port of Portland, 2007. Draft Responses to EPA Comments on DEQ Source Control Decision (EPA Letter to DEQ 6/29/07). See spill records at Tab 18, specifically: • Multnomah County, 1995. Victims Assistance Program Restitution Claim DA# 1063996/Mischief I. • Century West Engineering Corporation, 1995. Terminal 5 Transformer Spill Cleanup, Terminal 5 – N. Lombard Street, Portland, Oregon, August 30, 1995. • Port of Portland, 1995. Letter to Mr. Dick Wittkop, Re: T5 Theft/Cleanup, August 3, 1995.
c. the amount of each hazardous substances, pollutants, or contaminants so released;	1. Transformer spill - Approximately 200- 300 gallons of mineral oil (non-PCB, non-hazardous material) was released. Fluid was reportedly escaping at a rate of approximately 1 gallon per minute at the time of discovery. 2. Gasoline spill - Approximately 500 gallons of gasoline was released. 3. Blue Lagoon - See responses to Questions 8, 13, 17, 21, 26, 27 and 47. 4. Stained soils - See Alcatel 104(e) response for details.	See environmental site assessment and transaction-related reports at Tab 8, specifically: • Dames & Moore, 1988. Draft Final Report, Port of Portland, Property Transfer Environmental Assessment, Terminal 5 Cable Site, Portland, Oregon, prepared for the Port of Portland, Portland, Oregon, June 29, 1988. See Blue Lagoon records at Tab 9. See site investigation documents at Tab 10, specifically: • Port of Portland, 2000. Preliminary Assessment, September 5, 2000. • Port of Portland, 2007. Draft Responses to EPA Comments on DEQ Source Control Decision (EPA Letter to DEQ 6/29/07). See spill records at Tab 18, specifically: • Multnomah County, 1995. Victims Assistance Program Restitution Claim DA#

		1063996/Mischief I. • Century West Engineering Corporation, 1995. Terminal 5 Transformer Spill Cleanup, Terminal 5 – N. Lombard Street, Portland, Oregon, August 30, 1995. • Port of Portland, 1995. Letter to Mr. Dick Wittkop, Re: T5 Theft/Cleanup, August 3, 1995.
d. where such releases occurred;	1. Transformer spill - The spill occurred in the southwest quadrant of Terminal 5 property approximately 250 feet north of the Blue Lagoon. 2. Gasoline spill - The release occurred along the north fence of the EOSM property and southwest of the T5 Port Expansion Area (currently the south portion of the PBT leasehold). 3. Blue Lagoon – See responses to Questions 8, 13, 17, 21, 26, 27 and 47. 4. Stained soils - minor soil staining was observed at the STC Submarine Systems leasehold in several areas including west of the building, east of the drum storage area, and the south central portion of the property.	See environmental site assessment and transaction-related reports at Tab 8, specifically: • Dames & Moore, 1988. Draft Final Report, Port of Portland, Property Transfer Environmental Assessment, Terminal 5 Cable Site, Portland, Oregon, prepared for the Port of Portland, Portland, Oregon, June 29, 1988. See Blue Lagoon records at Tab 9. See site investigation documents at Tab 10, specifically: • Port of Portland, 2000. Preliminary Assessment, September 5, 2000. • Port of Portland, 2007. Draft Responses to EPA Comments on DEQ Source Control Decision (EPA Letter to DEQ 6/29/07). See spill records at Tab 18, specifically: • Multnomah County, 1995. Victims Assistance Program Restitution Claim DA# 1063996/Mischief I. • Century West Engineering Corporation, 1995. Terminal 5 Transformer Spill Cleanup, Terminal 5 – N. Lombard Street, Portland, Oregon, August 30, 1995. • Port of Portland, 1995. Letter to Mr. Dick

		Wittkop, Re: T5 Theft/Cleanup, August 3, 1995.
e. any and all activities undertaken in response to each such release or threatened release, including the notification of any agencies or governmental units about the release;	1. Transformer spill - The leak was reported to the Port's Environmental Manager for Marine Operations. On June 1, 1995, Morgan Machinery Moving and Rigging moved the transformer and the metering box away from the spill so that contaminated soil could be excavated. Approximately 30 yards of soil and 1,200 gallons of water were removed from the site and taken to TPS Soil Technologies and Harbor Oil, respectively, for disposal. During the excavation work, a smaller, older spill was identified east of the transformer and a separate excavation was performed. The excavations were backfilled with 29.2 tons of imported fill from Pacific Rock Products in Vancouver, WA and 5 cubic yards of fill from Angell Bros. Inc. in Portland, OR. 2. Gasoline spill - See EOSM 104(e) response for details. Impacted soils were excavated and sent for off-site thermal treatment. 3. Blue Lagoon – See responses to Questions 8, 13, 17, 21, 26, 27 and 47, 4. Stained soils - See Alcatel 104(e) response for details. Approximately 30 cubic yards of impacted soil was excavated and taken to the Killingsworth Landfill for disposal.	See environmental site assessment and transaction-related reports at Tab 8, specifically: • Dames & Moore, 1988. Draft Final Report, Port of Portland, Property Transfer Environmental Assessment, Terminal 5 Cable Site, Portland, Oregon, prepared for the Port of Portland, Portland, Oregon, June 29, 1988. See Blue Lagoon records at Tab 9. See site investigation documents at Tab 10, specifically: • Port of Portland, 2000. Preliminary Assessment, September 5, 2000. • Port of Portland, 2007. Draft Responses to EPA Comments on DEQ Source Control Decision (EPA Letter to DEQ 6/29/07). See spill records at Tab 18, specifically: • Multnomah County, 1995. Victims Assistance Program Restitution Claim DA# 1063996/Mischief I. • Century West Engineering Corporation, 1995. Terminal 5 Transformer Spill Cleanup, Terminal 5 – N. Lombard Street, Portland, Oregon, August 30, 1995. • Port of Portland, 1995. Letter to Mr. Dick Wittkop, Re: T5 Theft/Cleanup, August 3, 1995.
f. any and all investigations of the circumstances, nature, extent or location of each release or threatened release including, the results of any soil, water (ground and surface), or air testing undertaken;	1. Transformer spill - Century West Engineering collected soil and groundwater samples during the excavation and analyzed them for TPH. Analytical test results revealed TPH at 20 parts per million or less in all soil samples – including the sample obtained from the older spill. TPH was detected in groundwater and further analyzed for PAHs, which were detected up to 2.2 ppb (phenanthrene). Impacted soils were transported to Oregon Hydrocarbons, Inc. on August 14, 1995 for treatment by thermal desorption. The approximately 1,200 gallons of	See environmental site assessment and transaction-related reports at Tab 8, specifically: • Dames & Moore, 1988. Draft Final Report, Port of Portland, Property Transfer Environmental

	groundwater was also transported to Oregon Hydrocarbon Inc. for treatment. 2. Gasoline spill - Groundwater monitoring wells were installed and sampling was conducted, with results indicating a westerly gradient and gasoline constituents in groundwater. Although relatively high benzene concentrations were present (up to 3.18 mg/l in October 1999 adjacent to EOSM's north fence), continued groundwater monitoring indicated decreasing concentrations, and in 2005, the DEQ issued an NFA determination for this spill. 3. Blue Lagoon – See responses to Questions 8, 13, 17, 21, 26, 27 and 47. 4. Stained soils – Soil samples collected from the stained areas at the STC Submarine Systems leasehold revealed detections of PAHs. See 1988 Environmental Assessment and Alcatel's 104(e) response for additional information.	Assessment, Terminal 5 Cable Site, Portland, Oregon, prepared for the Port of Portland, Portland, Oregon, June 29, 1988. See Blue Lagoon records at Tab 9. See site investigation documents at Tab 10, specifically: • Port of Portland, 2000. Preliminary Assessment, September 5, 2000. • Port of Portland, 2007. Draft Responses to EPA Comments on DEQ Source Control Decision (EPA Letter to DEQ 6/29/07). See spill records at Tab 18, specifically: • Multnomah County, 1995. Victims Assistance Program Restitution Claim DA# 1063996/Mischief I. • Century West Engineering Corporation, 1995. Terminal 5 Transformer Spill Cleanup, Terminal 5 – N. Lombard Street, Portland, Oregon, August 30, 1995. • Port of Portland, 1995. Letter to Mr. Dick Wittkop, Re: T5 Theft/Cleanup, August 3, 1995.
g. all persons with information relating to these releases; and	1. Transformer spill - Padraic Quinn, Port Environmental Manager for Marine Operations 2. Gasoline spill - See EOSM 104(e) response for details. 3. Blue Lagoon – See responses to Questions 8, 13, 17, 21, 26, 27 and 47. 4. Stained soils - See Alcatel 104(e) response for details.	
h. list all local, state, or federal departments or agencies notified of the release, if applicable;	1. Transformer spill - This could not be determined using available records. 2. Gasoline spill - See EOSM 104(e) response for details. DEQ was notified of the spill. 3. Blue Lagoon – See responses to Questions 8, 13, 17, 21, 26, 27 and 47. 4. Stained soils - See Alcatel 104(e) response for details.	
63. Was there ever a spill, leak, release or discharge of waste, including petroleum, or hazardous substances, pollutant or contaminant into any subsurface disposal system or floor drain inside or under a building on the Property? If the answer to the preceding question is anything but an unqualified	Not to the Port's knowledge. The current tenants at Terminal 5 listed above in response to Question 4 are preparing their own 104(e) responses and will provide details for this question as it relates to operations at their leaseholds.	

"no", identify:		
a. where the disposal system or floor drains were located;	Not applicable.	
b. when the disposal system or floor drains were installed;	Not applicable.	
c. whether the disposal system or floor drains were connected to pipes;	Not applicable.	
d. where such pipes were located and emptied;	Not applicable.	
e. when such pipes were installed;	Not applicable.	
f. how and when such pipes were replaced. or repaired; and	Not applicable.	
g. whether such pipes ever leaked or in any way released such waste or hazardous substances into the environment.	Not applicable.	
64. Has any contaminated soil ever been excavated or removed from the Property? Unless the answer to the preceding question is anything besides an unequivocal "no", identify and provide copies of any documents regarding:	Yes. See also the response to Question 62 above. Soils were excavated in connection with: 1. Transformer spill in 1995 (see response to Question 62); 2. Gasoline spill in 1997 along southern property boundary (see response to Question 62); 3. Stained soils related to drum storage area at STC Submarine Systems – see response to Question 62 and also Alcatel's 104(e) response. 4. Soil from PBT expansion – Some of the soil excavated during storage building expansion and rail loop construction exceeded background levels (but not industrial PRGs) for barium, chromium and lead. This material was hauled off-site and disposed as non-hazardous waste at Waste Management Inc.'s (WMI) Subtitle D landfill in Hillsboro, Oregon (Hillsboro Landfill) under WMI Permit Number 9951.	See environmental site assessment and transaction-related reports at Tab 8, specifically: • Dames & Moore, 1988. Draft Final Report, Port of Portland, Property Transfer Environmental Assessment, Terminal 5 Cable Site, Portland, Oregon, prepared for the Port of Portland, Portland, Oregon, June 29, 1988. See Blue Lagoon records at Tab 9. See site investigation documents at Tab 10, specifically: • Port of Portland, 2000. Preliminary Assessment, September 5, 2000. • Port of Portland, 2007. Draft Responses to EPA Comments on DEQ Source Control Decision (EPA Letter to DEQ 6/29/07). • Ash Creek Associates, Inc., 2007. Portland Bulk Terminal Expansion Construction Oversight – Soil and Groundwater Handling, September 14, 2007. See spill records at Tab 18, specifically:

		• Multnomah County, 1995. Victims Assistance Program Restitution Claim DA# 1063996/Mischief I. • Century West Engineering Corporation, 1995. Terminal 5 Transformer Spill Cleanup, Terminal 5 – N. Lombard Street, Portland, Oregon, August 30, 1995. • Port of Portland, 1995. Letter to Mr. Dick Wittkop, Re: T5 Theft/Cleanup, August 3, 1995.
a. *amount of soil excavated;*	1. Transformer spill - The leak was reported to the Port's Environmental Manager for Marine Operations. On June 1, 1995, Morgan Machinery Moving and Rigging moved the transformer and the metering box away from the spill so that contaminated soil could be excavated. Approximately 30 yards of contaminated soil was removed and taken to TPS Soil Technologies. During the excavation work, a smaller, older spill was identified east of the transformer and a separate excavation was performed. The excavations were backfilled with 29.2 tons of imported fill from Pacific Rock Products in Vancouver, WA and 5 cubic yards of fill from Angell Bros. Inc. in Portland, OR. 2. Gasoline spill - See EOSM 104(e) response for details. Impacted soils were excavated and sent for off-site thermal treatment. The amount of soil removed is not known. 3. Stained soils – Approximately 30 cubic yards of contaminated soils were excavated and removed from the Alcatel leasehold. 4. Soil from PBT expansion – 12.14 tons of soil was hauled to the Hillsboro Landfill.	See environmental site assessment and transaction-related reports at Tab 8, specifically: • Dames & Moore, 1988. Draft Final Report, Port of Portland, Property Transfer Environmental Assessment, Terminal 5 Cable Site, Portland, Oregon, prepared for the Port of Portland, Portland, Oregon, June 29, 1988. See Blue Lagoon records at Tab 9. See site investigation records at Tab 10, specifically: • Port of Portland, 2000. Preliminary Assessment, September 5, 2000. • Port of Portland, 2007. Draft Responses to EPA Comments on DEQ Source Control Decision (EPA Letter to DEQ 6/29/07). • Ash Creek Associates, Inc., 2007. Portland Bulk Terminal Expansion Construction Oversight – Soil and Groundwater Handling, September 14, 2007. See spill records at Tab 18, specifically: • Multnomah County, 1995. Victims Assistance

		Program Restitution Claim DA# 1063996/Mischief I. • Century West Engineering Corporation, 1995. Terminal 5 Transformer Spill Cleanup, Terminal 5 – N. Lombard Street, Portland, Oregon, August 30, 1995. • Port of Portland, 1995. Letter to Mr. Dick Wittkop, Re: T5 Theft/Cleanup, August 3, 1995.
b. location of excavation presented on a map or aerial photograph;	Figures are included in the applicable reference documents.	
c. manner and place of disposal and/or storage of excavated soil;	1. Transformer spill - TPS Soil Technologies 2. Gasoline spill – See EOSM 104(e) response for more information. 3. Stained soils - Impacted soils from Alcatel were disposed of at Killingsworth Landfill 4. Soil from PBT expansion was sent to the Hillsboro Landfill.	
d. dates of soil excavation;	1. Transformer Spill – June 1, 1995 2. Gasoline spill – Unknown. See EOSM 104(e) response. 3. Stained soils – July 8, 1988 4. Soil from PBT expansion – April 20, 2006	
e. identity of persons who excavated or removed the soil, if other than a contractor for Respondent;	1. Transformer Spill – Morgan Machinery Moving & Rigging 2. Gasoline spill – Unknown. See EOSM 104(e) response. 3. Stained Soils – Hahn & Associates 4. Soil from PBT expansion – West Coast Marine	
f. reason for soil excavation;	See response to Questions 62 and 64 (a) above.	
g. whether the excavation or removed soil contained hazardous substances, pollutants or contaminants, including petroleum, what constituents the soil contained, and why the soil contained such constituents;	See response to Questions 62 and 64 (a) above.	
h. all analyses or tests and results of analyses of the soil that was removed from the Property;	See the response to Questions 62 and 64 (a) above.	
i. all analyses or tests and results of analyses of the excavated area after the soil was removed from the Property; and	See the response to Questions 62 and 63 (a) above.	
j. all persons, including contractors, with information about (a) through (i) of this request.	See the response to Questions 62 and 64 (a) above.	

65. Have you ever tested the groundwater under your Property? If so, please provide copies of all data, analysis, and reports generated from such testing.	Groundwater sampling investigations have occurred on the Terminal 5 property including the following: 1) Blue Lagoon 2) Gasoline Spill along southern property boundary 3) Transformer Spill. See referenced reports for data analyses.	See Blue Lagoon records at Tab 9. See site investigation documents at Tab 10, specifically: • Ash Creek Associates, Inc., 2007. Portland Bulk Terminal Expansion Construction Oversight – Soil and Groundwater Handling, September 14, 2007. • August 31, 2001 Letter from Port to DEQ. • BBL/ACA/NewFields, 2006a. Groundwater Monitoring Report, December 2005, Terminal 5 Upland Facility. Prepared for Port of Portland, January 2006. • BBL/ACA/NewFields, 2006b. Draft Contaminated Area and Media Management Plan, Terminal 5 Upland Facility – January 2006 draft. • BBL/ACA/NewFields, 2006c. Contaminated Area and Media Management Plan, Terminal 5 Upland Facility – February 2006. See spill records at Tab 18.
66. Have you treated, pumped, or taken any kind of response action on groundwater under your Property? Unless the answer to the preceding question is anything besides an unequivocal "no", identify:	Yes, see the response provided in bullets (a) through (e) below.	
a. reason for groundwater action;	1. Groundwater was sampled during a number of investigations related to the filling of the Blue Lagoon. Later, after barium, iron, and manganese were detected at or near the DEQ Screening Level Values for aquatic receptors, DEQ requested that groundwater near the former pond be managed under a CMMP. A CMMP has been prepared and approved by the DEQ. 2. Groundwater was pumped from the excavation pit during the cleanup of the gasoline spill near the southern Terminal 5 property boundary. 3. Groundwater was pumped and transported to an off-site facility for treatment related to the transformer spill.	See environmental site assessment and transaction-related reports at Tab 8. See Blue Lagoon records at Tab 9. See site investigation documents at Tab 10. See spill records at Tab 18.
b. whether the groundwater contained hazardous substances, pollutants or contaminants, including petroleum, what constituents the groundwater contained, and why the groundwater contained such constituents;	1. Blue Lagoon - Groundwater samples collected from around the Blue Lagoon from 1993-2005 were analyzed to total and dissolved, metals, pesticides, PCBs, herbicides, oil and grease, and volatile organic compounds. Pesticides, PCBs, herbicides, oil and grease, and VOCs were not detected. Metals were detected on several occasions and were considered constituents of interest (COI). The detection of metals can be attributed to the	See environmental site assessment and transaction-related reports at Tab 8. See Blue Lagoon records at Tab 9.

	disposal of steel slag in the pond from the 1970s to the 1990s. 2. Gasoline spill - Groundwater removed from the gasoline spill contained gasoline-related constituents. 3. Transformer spill - Groundwater removed from the transformer spill contained TPH and PAHs.	See site investigation documents at Tab 10. See spill records at Tab 18.
c. all analyses or tests and results of analyses of the groundwater;	1. Blue Lagoon - A number of groundwater investigations have been performed at the Terminal 5 or adjacent to the Terminal 5 property related to the Blue Lagoon including the following: • 1993 Facility Investigation – Century West Engineering installed four groundwater monitoring wells (MW-1 through MW-4) and sampled groundwater (Century West, 1994) • 1995 Facility Investigation – PTI Environmental Services sampled groundwater (PTI, 1995) • Groundwater monitoring – groundwater samples were collected from the monitoring wells on eight occasions between October 1993 and December 2005 (Hahn & Associates, 1999 and BBL/Ash Creek/Newfields, 2006). 2. Gasoline spill - Groundwater was sampled in response to a gasoline spill on the adjacent southern property owned by EOSM. Groundwater monitoring wells were installed and sampling was conducted, with results indicating a westerly gradient and gasoline constituents in groundwater. Benzene was present (up to 3.18 mg/l in October 1999 adjacent to EOSM's north fence); however, continued groundwater monitoring indicated decreasing concentrations. See EOSM's 104(e) response for additional information. 3. Transformer spill - Groundwater was collected in response to the transformer spill (See Question 62). Century West Engineering collected soil and groundwater samples during the excavation which were analyzed for TPH. Analytical test results revealed 20 parts per million or less in all soil samples – including the sample obtained from the older spill. TPH was detected in groundwater and further analyzed for PAHs. Analytical results revealed non-carcinogenic PAHs ups 2.2 ppb. Contaminated groundwater was also transported to Oregon Hydrocarbon Inc. for treatment.	See environmental site assessment and transaction-related reports at Tab 8. See Blue Lagoon records at Tab 9. See site investigation documents at Tab 10. See spill records at Tab 18.
d. if the groundwater action has been completed, describe the basis for ending the groundwater action; and	1. Blue Lagoon - The Port has completed the CMMP and received DEQ approval. The Port has requested regulatory closure of the Blue Lagoon under DEQ ECSI file #1686. We understand that the DEQ is recommending an NFA. 2. Gasoline spill - In 2005, the DEQ issued an NFA determination for the gasoline spill. See EOSM's individual 104(e) response. 3. Transformer spill - No regulatory action was taken with regard to the transformer spill.	See environmental site assessment and transaction-related reports at Tab 8. See Blue Lagoon records at Tab 9. See site investigation documents at Tab 10. See spill records at Tab 18.
e. all persons, including contractors, with information about (a) through (c) of this request.	1. Blue Lagoon – EOSM, Century West Engineering, PTI Environmental Services (now Exponent), Hahn & Associates, 1999 and BBL/Ash Creek/Newfields 2. Gasoline spill - EOSM and its consultants, including Hart Crowser and Exponent, 3. Transformer spill – Port of Los Angeles, Century West Engineering, Oregon Analytical Laboratory, Century Testing Laboratories, Harbor Oil, Inc.	See environmental site assessment and transaction-related reports at Tab 8. See Blue Lagoon records at Tab 9.

		See site investigation documents at Tab 10. See spill records at Tab 18.
67. Was there ever a spill, leak, release or discharge of a hazardous substance, waste, or material into the Willamette River from any equipment, structure, or activity occurring on, over, or adjacent to the river? If the answer to the preceding question is anything but an unqualified "no", identify:	Not to the Port's knowledge.	
a. the nature of the hazardous substance, waste, or material spilled, leaked, released or discharged;	Not applicable.	
b. the dates of each such occurrence;	Not applicable.	
c. the amount and location of such release;	Not applicable.	
d. were sheens on the river created by the release;	Not applicable.	
e. was there ever a need to remove or dredge any solid waste, bulk product, or other material from the river as a result of the release? If so, please provide information and description of when such removal/dredging occurred, why, and where the removed/dredged materials were disposed.	Not applicable.	
68. For any releases or threatened releases of PCB(s), identify the date, quantity, location and type of PCB(s) or PCB(s) containing materials or liquids, and the nature of any response to or cleanup of the release.	As discussed above, in 1995, PTI Environmental Services conducted site characterization activities at the Blue Lagoon. Their study included sampling slag from the lagoon banks, sediment, adjacent surface soils, and groundwater from the monitoring wells. The suite of chemical analyses included PCBs, which revealed detections in the sediment at 1.4 to 10 mg/kg. The source of the PCB detections in the lagoon sediments is not known, but given the colocated metals associated with the former slag cooling activities in the Blue Lagoon and the known PCB impacts on the EOSM property, is assumed to be connected with EOSM's operations. Based on the detected concentrations compared with applicable regulatory criteria and their relative immobility in the environment, it was determined the materials could remain in place as long as they weren't going to be disturbed.	See Blue Lagoon records at Tab 9, specifically: • PTI Environmental Services, 1995. Site Characterization for the "Blue Lagoon" at Marine Terminal 5, prepared for the Port of Portland, Portland, Oregon, April 1995. See site investigation documents at Tab 10, specifically: • Port of Portland, 2007. Draft Responses to EPA Comments on DEQ Source Control Decision (EPA Letter to DEQ 6/29/07).
69. For any releases or threatened releases of PCB(s) and/or PCB(s) containing materials or liquids, identify and provide copies of any documents regarding the quantity and type of waste generated as a result of the release or threatened release, the disposition of the waste, provide any reports or records relating to the release or threatened release, the response or cleanup and any records relating to	Not applicable.	

any enforcement proceeding relating to the release or threatened release.		
Section 7.0 - Property Investigations		
70. Provide information and documentation concerning all inspections, evaluations, safety audits, correspondence and any other documents associated with the conditions, practices, and/or procedures at the Property concerning insurance issues or insurance coverage matters.	Under the Port's Environmental Management System, the Port does periodic audits of its activities at Terminal 5. In addition, PBT is required by its lease to perform periodic audits of its facility. The Port's audits of its activities at Terminal 5 had no findings relating to hazardous substance releases. PBT will address its audits in its 104(e) response. The Port has been having communications with its insurers regarding defense and settlement of third party claims associated with the Portland Harbor Superfund Site. The communications between the Port and its insurers are confidential communications in an ongoing insurance settlement process among the Port and its insurers and their respective legal counsel in respect of which the Port and its insurers have common interests adverse to third party governmental agencies and other potentially responsible parties in the Harbor (including associated upland sites) where there is actual or a reasonable likelihood of future litigation. Such communications are attorney-client and work product privileged confidential communications under the common interests doctrine. As relates to Terminal 5, the factual information underpinning these confidential communications has, nonetheless, been disclosed in the documents and responses provided to these questions.	
71. Describe the purpose for, the date of initiation and completion, and the results of any investigations of soil, water (ground or surface), sediment, geology, and hydrology or air quality on or about each Property, Provide copies of all data, reports, and other documents that were generated by you or a consultant, or a federal or state regulatory agency related to the investigations that are described.	A number of environmental investigations have been performed at Terminal 5 property including the following: 1. Blue Lagoon – several soil, groundwater, hydrogeological, sediment and surface water investigations. 2. Dredge and Fill Material – sediment and soil characterizations completed. 3. Transformer Spill – soil and groundwater sampling conducted. 4. EOSM gasoline spill – soil and groundwater sampling conducted. 5. Stained soils – limited surficial soil sampling (see response to Question 62) 6. Fill material sampled – In 1995, approximately 200,000 cy of soils from seven location in the Rivergate Industrial District (owned by the Port) were placed on the Terminal 5 property. A characterization study completed by Century West analyzed for petroleum hydrocarbons, and total metals. Test results did not reveal TPH in any of the soil samples. Concentrations of barium, chromium, lead, mercury, selenium and silver were well below industrial cleanup levels. Arsenic was detected slightly above the industrial clean up level. However, arsenic is a common background element. See attached reports: **Blue Lagoon** Ash Creek Associates, Inc., 2007. Portland Bulk Terminal Expansion Construction Oversight –Soil and Groundwater Handling, September 14, 2007.	See environmental site assessment and transaction-related reports at Tab 8. See Blue Lagoon records at Tab 9. See site investigation documents at Tab 10. See surcharge material information at Tab 11. See dredging records at Tab 15. See spill records at Tab 18.

BBL/ACA/NewFields, 2006. Contaminated Area and Media Management Plan, Terminal 5 Upland Facility – January 2006 draft.

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Century West Engineering Corporation, 1994. Preliminary Site Investigation, Blue Lagoon, Terminal 5, prepared for the Port of Portland, Portland, Oregon, February 4, 1994.

Century West, 1994. Preliminary Site Assessment for the Blue Lagoon, Terminal 5. February 4, 1994.

GeoEngineers, 1996. Letter report entitled Excavation Activities, Terminal Five, "Blue Lagoon," Port of Portland, Portland, Oregon, July 15, 1996.

Hahn and Associates, 1995. Solid and Hazardous Waste Determination and Disposal Assistance, Sandblasting Grit Material, Port of Portland Marine Terminal 5, North Lombard, Portland, Oregon, October 11, 1995.

Hahn and Associates, 1999. Sampling Analysis Results.

Hahn and Associates, 1999. Groundwater Monitoring Report, Port of Portland, "Blue Lagoon" Site, Terminal 5, Portland, Oregon. December 22, 1999.

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Century West Engineers, 1995. Letter report regarding Sampling and Analysis of Fill Soil for Terminal 5, Rivergate Industrial District, Portland, Oregon, December 1, 1995.

the Port of Portland, Portland, Oregon, January 14, 1997.

Hart Crowser, 1999. Volume I, Sediment Characterization Study of Local Sponsor's Berths; Columbia and Willamette River Navigation Channel Deepening; Longview and Kalama, Washington and Portland, Oregon, prepared for the Port of Portland, Portland, Oregon, February 1, 1999.

Hart Crowser, 2000. Sediment Characterization Study, Terminal 5, Berths 501 & 503, Port of Portland, prepared for the Port of Portland, Portland, Oregon, March 9, 2000.

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Century West Engineering Corporation, 1995. Terminal 5 Transformer Spill Cleanup, Terminal 5 – N. Lombard

Street, Portland, Oregon, August 30, 1995.

Emcon, 1995. Phase 2, Environmental Site Assessment, Port of Portland Terminal 5 Facility, Portland, Oregon, prepared for Hall-Buck Marine, Inc., July 12, 1995.

Emcon, 1999. Water Quality Evaluation Status and Analytical Results.

Others

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Hart Crowser, 1991. Environmental Assessment Report, Marine Terminal 5, Portland, Oregon, prepared for the Port of Portland, Portland, Oregon, August 12, 1991.

Hart Crowser, 1997. Sediment Characterization Study, River Terminals 1, 2 and 5, Willamette River.

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Dames & Moore, 1967. Soils Investigation, Proposed Fill Area, Rivergate Area, Portland, Oregon, prepared for the Port of Portland, Portland, Oregon, May 18, 1967.

Dames & Moore, 1967. Soils Investigations, Four Locations – Rivergate Area, Portland, Oregon, prepared for the Port of Portland, Portland, Oregon, May 24, 1967.

Dames & Moore, 1967. Soils and Foundation Study, Rivergate Industrial District, Portland, Oregon for the Port of Portland, prepared for Daniel, Mann, Johnson, & Mendenhall, Los Angeles, California, May 31, 1967.

Dames & Moore, 1973. Letter report regarding Foundation Support, Proposed Grain Storage Facility, Two Alternative Sites, Rivergate Industrial Area, Portland, Oregon, prepared for Homan & Lawrence Engineering Company, San Francisco, California, February 9, 1973.

Dames & Moore, 1973. Proposal, Foundation Investigation, Proposed Grain Storage Facility, Rivergate Area (Site B), Portland, Oregon, prepared for Homan & Lawrence Engineering Company, San Francisco, California, February 13, 1973.

Dames & Moore, 1973. Preliminary Report, Foundation Investigation, Proposed Grain Storage Facility, Rivergate Industrial District, Portland, Oregon, prepared for Homan & Lawrence Engineering Company, San Francisco, California, April 10, 1973.

	Dames & Moore, 1973. Foundation Investigation, Proposed Industrial Site North of Oregon Steel Mills, Rivergate Industrial District, Portland, Oregon, prepared for the Port of Portland, Portland, Oregon, May 1, 1973. Dames & Moore, 1973. Foundation Investigation, Proposed Export Grain Terminal Docking Facility, Rivergate Industrial District, Portland, Oregon, prepared for Homan & Lawrence Engineering Company, San Francisco, California, July 16, 1973. Dames & Moore, 1995. Report of Geotechnical Investigation, Proposed Bulk Storage Building, Port of Portland Terminal 5 for Hall-Buck Marine, prepared for Spantec Constructors, Barnaby, British Columbia, Canada, June 9, 1995. Dravo Corporation, 1982. Pacific Coal Company, Coal Transfer Terminal, Portland, Oregon, Waterside Civil Test Pile Program. Geotechnical Resources Incorporated, 1997. Consultation Services, Deepening of Berths 401, 501 and 603 to 605, Portland, Oregon, prepared for the Port of Portland, Portland, Oregon, August 26, 1997. Kleinfelder, 2005. Geotechnical Investigation Report, Proposed Addition to Bulk Potash Storage Facility, Terminal 5, Port of Portland, Portland, Oregon, prepared for the Port of Portland, Portland, Oregon, October 4, 2005.	
72. Describe any remediations or response actions you or your agents or consultants have ever taken on each Property either voluntarily or as required by any state or federal agency. If not otherwise already provided under this Information Request, provide copies of all investigations, risk assessments or risk: evaluations, feasibility studies, alternatives analysis, implementation plans, decision documents, monitoring plans, maintenance plans, completion reports, or other document concerning remediation or response actions taken on each Property.	See responses to Questions 64 and 66, above. As requested by DEQ, the Port has prepared a CMMP to provide for the appropriate management of buried lagoon sediment and groundwater at the location of the former Blue Lagoon. As described in the response to question 27, sediment and slag at the base of the former Blue Lagoon was found to have barium, chromium, copper, lead, and zinc at concentrations above local background. The sediment and slag were buried under an estimated 5 to 15 feet of sand fill when the lagoon was filled in 1996. The fill above the sediment and slag effectively mitigates any potential risks associated with exposure to the metals found in these materials, as long as the materials are handled appropriately if disturbed. Investigations by Century West in 1993 and PTI in 1995 demonstrated that adjacent soil had not been impacted. Groundwater directly adjacent to the former lagoon was found to have barium, iron, and manganese at concentrations above DEQ SLVs (although iron and manganese appear to be consistent with local background). The CMMP provides procedures for the proper handling of soil or groundwater potentially containing the constituents of interest (COI) in the area of the former lagoon. The DEQ found the CMMP acceptable in a letter to the Port dated January 17, 2006, if clarifications in the letter were included in the final version of the document. The Port submitted the final CMMP in February 2006 containing the requested clarifications. Reports documenting the investigation results and the CMMP have been referenced in response to earlier questions and are included with the 104e response package. The Port is currently engaged in discussions with DEQ to obtain confirmation that the property warrants a no further action decision.	See Blue Lagoon records at Tab 9. See site investigation documents at Tab 10.

73. Are you or your consultants planning to perform any investigations of the soil, water (ground or surface), geology, and hydrology or air quality on or about the Property? If so, identify:	No.	
a. what the nature and scope: of these investigations will be;	Not applicable.	
b. the contractors or other persons that will undertake these investigations;	Not applicable.	
c. the purpose of the investigations;	Not applicable.	
d. the dates when such investigations will take place and be completed; and	Not applicable.	
e. where on the Property such investigations will take place.	Not applicable.	
Section 8.0 - Corporate Information		
74. Provide the following information, when applicable, about you and/or your business(es) that are associated with each Property identified in response to Question 4:		
a. state the current legal ownership structure (e.g., corporation, sole proprietorship);	The Port of Portland was created by the Oregon legislature in 1891. Oregon Revised Statute 778 contains the authority of the Port of Portland. It is a state Port District for an area encompassing all of Multnomah, Clackamas and Washington Counties. The Port is governed by a nine person commission appointed by the Governor of Oregon and confirmed by the State Senate.	See ORS 778 at Tab 19.
b. state the names and current addresses of all current and past owners of the business entity or, if a corporation, current and past officers and directors;	Port of Portland 121 NW Everett Portland, OR 97209	
c. discuss all changes in the business' legal ownership structure, including any corporate successorship, since the inception of the business entity. For example, a business that starts as a sole proprietorship, but then incorporates after a few years, or a business that is subsequently acquired by and merged into a successor. Please include the dates and the names of all parties involved;	Not applicable.	
d. the names and addresses of all current or past business entities or subsidiaries in which you or your business has or had an interest that have had any operational or ownership connection with the Properties identified in response to Question 4. Briefly describe the business activities of each such identified business entities or subsidiaries; and	Not applicable.	

e. if your- business formerly owned or operated a Property identified in response to Question 4, describe any arrangements made with successor owners or operators regarding liability for environmental contamination or property damage.	Not applicable.	
75. List all names under which your company or business has ever operated and has ever been incorporated. For each name, provide the following information:	Port of Portland Registered Trademark Name - Rivergate Industrial District	
a. whether the company or business continues to exist, indicating the date and means by which it ceased operations (e.g.., dissolution, bankruptcy, sale) if it is no longer in business;	Yes, the Port of Portland is extant.	
b. names, addresses, and telephone numbers of all registered agents, officers and operations management personnel; and	Registered Agent: Carla L. Kelley General Counsel Port of Portland 121 NW Everett Street Portland, OR 97209 503-944-7031 President, Port Commission Judith A. Johansen (b) (6) Lake Oswego OR 97034 Home: (b) (6) Vice President, Port Commission Mary F. Olson Norris, Olson & Associates, Inc. 7105 SE 19th Ave. Portland OR 97202 503-235-2425 Treasurer, Port Commission William D. Thorndike, Jr Medford Fabrication PO Box 1588 1109 Court Street Medford OR 97501 541-770-1172 Secretary, Port Commission Steven H. Corey	

	Corey, Byler, Rew, Lorenzen & Hojem PO Box 218 Pendleton OR 97801	
c. names, addresses, and telephone numbers of all subsidiaries, unincorporated divisions or operating units, affiliates, and parent corporations if any, of the Respondent.	Not applicable.	
76. Provide all copies of the Respondent's authority to do business in Oregon. Include all authorizations, withdrawals, suspensions and reinstatements.	Oregon Revised Statutes 777 and 778.	See ORS 777 and 778 at Tab 19.
77. If Respondent is, or was at any time, a subsidiary of, otherwise owned or controlled by, or otherwise affiliated with another corporation or entity, then describe the full nature of each such corporate relationship, including but not limited to:	Not applicable.	
a. a general statement of the nature of relationship, indicating whether or not the affiliated entity had, or exercised, any degree of control over the daily operations or decision-making of the Respondent's business operations at the Site;	Not applicable.	
b. the dates such relationship existed;	Not applicable.	
c. the percentage of ownership of Respondent that is held by such other entity(ies);	Not applicable.	
d. for each such affiliated entity provide the names and complete addresses of its parent, subsidiary, and otherwise affiliated entities, as well as the names and addresses of each such affiliated entity's officers, directors, partners, trustees, beneficiaries, and/or shareholders owning more than five percent of that affiliated entity's stock;	Not applicable.	
e. provide any and all insurance policies for such affiliated entity(ies) which may possibly cover the liabilities of the Respondent at each Property; and	Not applicable.	
f. provide any and all corporate financial information of such affiliated entities, including but not limited to total revenue or total sales, net income, depreciation, total assets and total current assets, total liabilities and total current liabilities, net working capital (or net current assets), and net worth.	Not applicable.	

78. If Respondent is a partnership, please describe the partnership and provide a history of the partnership's existence. Provide a list of all current and past partners of any status (e.g., general, limited, etc.) and provide copies of all documents that created, govern, and otherwise rules the partnership, including any amendments or modifications to any of the originals of such documents, and at least five years of partnership meeting minutes.	Not applicable.	
Section 9.0 - Compliance With This Request		
79. Describe all sources reviewed or consulted in responding to this request, including, but not limited to:	Records reviewed for this request include the following Port departments: Marine and Industrial Development (MID) Environmental Affairs Legal Research Engineering Information Technology	
a. the name and current job title of all individuals consulted;	Nicole LaFranchise (Environmental Project Manager), Sara Moore (Environmental Liability Analyst), David Breen (Environmental Project Manager), Sebastian Degens (Marine Planning & Development Manager), Jeff Krug (Terminal Manager), Suzanne Brooks (Property Manager), Suzanne Barthelmess (Claims Manager), Mic Dorrance (Marine Maintenance Manager), Scott Carter (Property Manager), Lorali Sinnen (Property Manager II), Sheila David (Environmental Analyst), Kathy Balogh (Environmental Specialist II), Sabrina Rowlette (Environmental Technician)	
b. the location where all sources reviewed are currently reside; and	Port of Portland offices and records storage	
c. the date consulted.	March 2008- May 2008.	
80. If not already provided, identify and provide a last known address or phone number for all persons, including Respondent's current and former employees or agents, other than attorneys, who have knowledge or information about the generation, use, purchase, storage, disposal, placement, or other handling of hazardous materials at, or transportation of hazardous substances, waste, or materials to or from each Property identified in response to Question 4.	Not applicable.	
81. If any of the documents solicited in this information request are no longer available, please indicate the reason why they are no longer available. If the records were destroyed, provide us with the following;	Records Review and destruction notices were reviewed to determine if any relevant records were destroyed pertaining to the Terminal 5 property. Consistent with public-recordkeeping requirements, the Records Review and Destruction Notices are maintained at the Port of Portland Administrative office. The Destruction Notices contain standard information including the former archive box number, originating department, and date of destruction. Limited information is provided on the contents of the files formerly contained within the boxes; records are	See records management information at Tab 20.

	described generally, using categories such as "miscellaneous correspondence", "chronological files", "memos", etc. While some provide a reference to a property to which the records may have pertained, it is so general that there is no way to determine with any certainty the nature or content of the documents that were destroyed.	
a. the document retention policy between 1937 and the present;	The Port is required by law to retain all "public records" for at least the period of time specified in a retention schedule approved by the State Archivist. The Port of Portland Records Retention and Disposition Schedule is the approved retention schedule for the Port of Portland. "Public records" include documents, books, papers, photographs, files, sound recordings, or machine-readable electronic records, regardless of physical form or characteristics, which are made, received, filed, or recorded by the Port in connection with the transaction of Port business. Employees must adhere to records retention and destruction procedures established by the Port's records manager in accordance with State statutes and the Port of Portland Records Retention and Disposition Schedule. The Port's retention and disposition schedules were suspended for records relevant to Portland Harbor when the Port received notice of its listing on the National Priority List in December 2000.	See records management information at Tab 20, specifically: • Ordinance 142 • Ordinance 149 • Ordinance 196 • 2001 Records Retention • 2001 Records Retention with 2003 Revision • 2008 Records Retention
b. the approximate date of destruction;	At this time, no documents have been identified as destroyed.	
c. a description of the type of information that would have been contained in the documents;	Not applicable	
d. the name, job title and most current address known by you of the person(s) who would have produced these documents; the person(s) who would have been responsible for the retention of these documents; the person(s) who would have been responsible for destroying the documents; and the person(s) who had and/or still have the originals or copies of these documents; and	Michael Wells Records Manager Port of Portland 121 NW Everett Street Portland, OR 97209	
e. the names and most current addresses of any person(s) who may possess documents relevant to this inquiry.	None known.	
82. Provide a description of all records available to you that relate to all of the questions in this request, but which have not been included in your responses.	The Port is in litigation with EOSM regarding hazardous substance releases connected to the EOSM facility (including the Blue Lagoon). The Port also believes that it is reasonably likely that it will be in litigation with others over the responsibility for contamination in the river off the Terminal 5 facility. Work product in anticipation of litigation and written communications in order for the Port to obtain legal advice are not disclosed as part of this submission. However, no underlying facts responsive to these questions have been withheld on these confidentiality grounds. See also response to Question 70.	Additional references are provided at Tab 21.